

The SCORE Project for Advancing Research on Religion and Cooperation (SPARRC)

Program Announcement and Call for Letters of Intent

With the support of a grant from the Templeton Religion Trust, in advancement of their ambitious, multi-decade [Social Consequences of Religion \(SCORE\) Initiative](#), the SCORE Project for Advancing Research on Religion and Cooperation (SPARRC) welcomes proposals from investigators from all scientific disciplines to research the social consequences of religion for cooperation and prosocial behavior.

SPARRC is the first Strand of the SCORE Initiative. It is currently entering a two-stage research phase. In the **Seed Project Stage** (described in detail in this document), we expect to fund approximately ten Seed Grants with budgets up to \$150,000 each. In the **Landmark Project Stage**, we will award up to \$4 million for Landmark Projects with budgets up to \$3 million. We will consider projects from investigators in all scientific disciplines, including but not limited to anthropology, biology, cognitive science, communications, computer science, demography, digital humanities, economics, epidemiology, human development, linguistics, neuroscience, political science, psychology, sociology, and quantitative history.

Before submitting full proposals, applicants must submit Letters of Intent (LOIs) by **June 17, 2024**.

This document explains SPARRC and provides instructions for preparing and submitting LOIs.

Background

Scholars have long been interested in the proposition that religious ideas, and the cultural traditions and institutions that arise around them, enable people to cooperate in the service of individual and group interests. Indeed, this idea is so pervasive and enduring—it can be traced to Eastern, Western, and South Asian philosophers in the fourth century BCE—that one could call it, with some justification, “The Folk Theory of Religion” (Bulbulia, Atkins, Gray, and Greenhill, 2014, p. 199). Additionally, many religions emphasize the importance of generosity and compassion toward others. Over the past two decades, the potential for religion to enable or inhibit cooperation and prosocial behavior has inspired theoretical and empirical work from investigators across many scientific disciplines. But there is much important work still to do.

Six Priorities

Following an extensive review of the state of the art in this area of research, we have identified six priorities we believe scientists should pursue in order to significantly advance science’s understanding of the consequences of religion for cooperation and prosocial behavior.

Priority #1: Shedding Light on Cause and Effect

Of the hundreds of empirical studies that help us understand religion’s links to cooperation and prosocial behavior, many lack the methodological features that enable scientists to draw valid

cause-and-effect conclusions (Campbell & Stanley, 1959; Dague & Lahey, 2019; Ohlsson & Kendler, 2019). For example, a common type of study in the social sciences is the cross-sectional observational study, in which researchers examine whether values of one attribute, measured at a single point in time, are correlated with values of another attribute measured at the same point in time. Although cross-sectional observational studies have been extraordinarily useful, for example, for testing whether highly religious people are more or less cooperative or prosocial than less religious people (Kelly, Kramer, & Shariff, 2024), mere associations of this sort are rather weak empirical evidence for cause-and-effect relationships between two entities because they are also consistent with a variety of conflicting hypotheses. To be sure, it is possible to take causality seriously even in cross-sectional work (Bulbulia, Schjoedt, Shaver, Sosis, & Wildman, 2021; Major-Smith, 2023), but some of the inferential limitations are severe.

SPARRC is interested in projects that assess causal claims rigorously. We therefore hope to identify projects that deploy one or more of the following methods for assessing causal relations: (a) experiments, in which investigators randomly assign individual units of observation (e.g., people, groups of people, houses of worship) to different levels of a religion-relevant independent variable (called an “exposure” or “treatment” in some disciplines), either in the laboratory or in the field; (b) “natural experiments,” largely pioneered in epidemiology and economics, that can produce valid cause-and-effect conclusions because the units of observation are exposed to different levels of a religion-relevant variable plausibly by chance; (c) longitudinal studies, which exploit the fact that in nature, time must pass for variables to exert their causal effects on other variables; and (d) computational models that explicitly characterize dynamic causal processes and emergent features of complex social systems, followed by efforts to validate the models by comparing their results to real-world data.

At the end of this document, we have provided a list of references for those wanting to learn more about studying religion using methods that can lead to stronger causal inference.

Despite our interest in supporting projects that assess cause-and-effect relations, it is, in theory, possible to win an award for a project *that is not designed to identify causal relationships*. To succeed, however, such a project would need to have exceptional promise.

Priority #2: Measuring Behavior (or the Material Residue it Leaves Behind)

Researchers who measure cooperation or prosocial behavior typically use one of five methods: (a) they obtain people’s reports of their own behavior, (b) they obtain observers’ reports of other people’s behavior; (c) they obtain people’s reports of their general attitudes toward cooperation or prosocial behavior; (d) they observe cooperative or prosocial behavior directly; or (e) they measure the outputs of cooperation or prosocial behavior, such as public goods or forms of wealth that exist only because people cooperated in order to create them. We believe the field needs more research using methods (b) through (e).

To the extent that religion has consequences for cooperation and prosocial behavior, those consequences are revealed through people’s behavior toward other people, not merely what they think about or feel toward other people. Although religion might have associations with (or even causal effects on) people’s thoughts and feelings, cooperation and prosocial behavior are

behavior. Prior research on the relationship of religion with cooperation and prosocial behavior has been dominated by studies examining associations of self-reports of religion with self-reports of cooperation and prosocial behavior (e.g., asking people how often they volunteer, or how often they donate to charity, or how altruistic they are). Even though self-report measures often correlate with actual behavior, the correlations are typically quite low, suggesting that the causal processes that generate people's *reports of their behavior* are not the same causal processes that generate their *behavior*.

SPARRC hopes to identify projects that measure religion, cooperation, and prosocial behavior via direct measurements. In the same spirit, we encourage projects that seek to validly measure religion, cooperation, and prosocial behavior based on aspects of human material culture (e.g., texts, artifacts, architecture, archaeological material).

Despite our interest in projects that use direct measures, we recognize that for some questions, self-report measures might be the best approach.

Priority #3: Attending to Multiple Time Scales and Multiple Levels of Analysis

The third priority involves considering the relationship of religion with cooperation and prosocial behavior over different time scales and at different levels of social organization. Religious cognitions can potentially influence people's behavior on the scale of seconds and minutes (Willard, Shariff, & Norenzayan, 2016; cf. Watanabe & Laurent, 2020). People's religious convictions and inclinations to cooperate might unfold over months, years, or even decades of human development (e.g., Reddish & Tong, 2023). Religious sects might arise, grow, decline, and then disappear over decades or centuries (Sosis & Bressler, 2003). Religious belief systems might arise, grow, decline, and then disappear over centuries or even millennia (Turchin et al., 2023; Watts et al., 2015).

Likewise, findings at one level of human organization—for example at the individual level, where researchers might experimentally manipulate the salience of religion for a single person in the lab—may not translate to another, such as collective action within a religious community or large-scale cooperation at the level of a society or between nations. The consequences of religion for cooperation and prosocial behavior could be measured at the level of individuals, dyads, small groups, social networks, or large collectives (e.g., cities or nations). As knowledge accumulates, we will want to know more than just whether religion changes cooperation or prosocial behavior: We will also want to know how and why it causes those changes.

Often, disciplines develop their preferred areas of methodological expertise regarding time scale and level of analysis. SPARRC seeks to fund a portfolio of projects that can shed light on the relationship of religion with cooperation and prosocial behavior at multiple time scales and multiple levels of analysis.

Priority #4: Considering Generalizability

The fourth priority involves testing the generalizability of knowledge within the field. When scientists make claims about human behavior, they are often making a number of extremely

broad generalizations that may not be correct. The claims that, for example, “religion promotes human cooperation,” or that “religion hinders prosocial behavior” are assumed, at least implicitly, to apply for every human in every part of the world at every point in human history and in every cultural context and at every measurable time scale and with every valid approach to studying the claims. These assumptions are probably incorrect. There are conditions over which scientific generalizations will apply, and there are conditions over which they won’t.

Often, the best way to test boundary conditions is to put a hypothesis to the test by asking something like, “under what conditions is this prediction most likely to fail?” SPARRC therefore seeks to fund projects that take active steps to evaluate the generalizability of claims across many of the most important facets of generalizability, including methods of manipulating and measuring religion, methods of measuring cooperation and prosocial behavior, populations, religions, geographic regions, societal forms, and time periods studied. Researchers should consider generalizability concerns as they plan their statistical analyses for testing their predictions (Yarkoni, 2022).

Priority #5: Contributing Resources that Advance the Field beyond the Project Itself

Empirical papers on religion, cooperation, and prosocial behavior already number in the hundreds. We are reluctant to fund more of the same. We want to fund projects with field-changing impact. Proposals should therefore be innovative in their approach to the task and their expected outputs and outcomes. We are of course interested in projects that lead to high-impact research on a relatively short time scale (e.g., 2-5 years after the grants end). These are important short-term indicators of progress.

However, we view SPARRC as an opportunity to create resources for the entire field, with which awardees can create value not only for their own work, but also for future research teams who can take advantage of those resources. We want to invest in projects that, if successful, will grow in value over time. For example, projects might secure this sort of long-term impact by creating new datasets that could be integrated with other existing sources of data, establishing longitudinal cohorts that can be maintained for future follow-ups as participants age, aggregating data across multiple research sites, or developing new computational tools that will improve the study of religion and cooperation beyond any individual project.

Therefore, we strongly encourage applicants to design projects that will generate resources from which future researchers can also derive value.

Priority #6: Practicing Open Science

The sixth priority involves efforts to increase rigor and transparency within the scientific study of religion. This means we will only fund projects involving pre-commitments to the highest disciplinary standards for open science, including preregistration of studies and analysis plans, the sharing of research protocols, materials, data, and code, and the sharing of preprints at the time of submission for publication. This approach will accelerate scientific progress by ensuring that the products of this research can be discovered more easily, can be accessed freely, and can be reproduced, reused, and built upon by others without restriction.

For example, preregistration on the [Open Science Framework](#) can improve the reliability and inferential validity of research, and can be used by other researchers seeking to replicate, reproduce, and build upon findings. Note that this requirement does not restrict grantees from carrying out unplanned analyses, but rather requires clarifying in research reports which analyses are theory-driven and which are data-driven. We encourage the use of [Registered Reports](#). The sharing of protocols, materials used to conduct research, and analytic code will make it possible for other researchers to reproduce reported results, replicate procedures used, and facilitate others in building upon the work. The [FAIR Principles](#) outline how data and associated metadata may be made Findable, Accessible, Interoperable, and Reusable. Finally, depositing preprints allows for rapid communication of new findings while establishing precedence, opening manuscripts to feedback beyond the formal peer-review process, and increasing visibility for work. In all of these things, our goal is to make the products of funded research as open as possible—that is, to the maximum extent that is ethically appropriate and legally permitted.

Further details on the open science requirements will accompany the invitation to submit a full proposal. For now, LOIs should signal investigators' willingness to commit to these standards.

SPARRC's Three-Stage Review and Funding Process

SPARRC's ultimate goal is to support **Landmark Projects**. To help investigators generate their best ideas and plans for Landmark Projects, we begin by funding **Seed Projects**. We will invite Investigators to submit full proposals for Seed Projects after we review their **Letters of Intent**.

Stage 1: Letters of Intent

We will evaluate Letters of Intent based on the quality of the ideas they would hope to pursue through a Landmark Project, as well as on the approach they would use during their Seed Project. *Thus, successful LOIs will show that the proposed Seed Project sets the stage for a successful Landmark Project.* We will evaluate potential using the following criteria:

- Theoretical sophistication
- Methodological rigor
- Innovation
- Qualifications of the research team
- Likelihood of long-term scientific impact
- Attention to the six field-advancing priorities enumerated here
- Evidence of commitment to preparing a proposal for a Landmark Project, should the Seed Project receive funding
- Evidence of institutional support

Stage 2: Seed Projects

To help researchers lay the plans for Landmark Projects that have the potential to transform research on the consequences of religion for cooperation and prosocial behavior, we expect to fund approximately ten 21-month **Seed Grants** of up to \$150,000 each. With Seed Grant

funding, Investigators could undertake a number of tasks: They could form teams that will establish preliminary infrastructure, pay for personnel, host small meetings or conferences, attend workshops, build new tools or sensors or algorithms, collect or analyze pilot data, or conduct any other activity they deem useful for building a case for the long-term potential of the Landmark Project they will propose. *Investigators should also view the performance period as a time to prepare their full proposals for Landmark Grants.*

Importantly, we expect Investigators to set aside funding in their Seed Grants to support a scholarly activity that will lead to a publication in a peer-reviewed journal. The paper could report the results of a new empirical project, provide a systematic review or meta-analysis, advance a new theory, or accomplish some other scholarly goal. We would like Seed Projects themselves to lead to new research products, even though those products would of course be smaller in scope than the Landmark Projects are expected to yield.

Investigators may choose to forgo applying for a Seed Grant and instead apply directly for a Landmark Grant in the next stage. Those who take this route will be required to submit a Letter of Intent prior to receiving an invitation to submit a full proposal for a Landmark Grant. We will publish more details at a later date.

Stage 3: Landmark Projects

The best way for Investigators to think about how to develop a Landmark Project is to ask themselves two questions:

- (1) “What could my team do over the next five years to conduct high-impact research on the consequences of religion for cooperation or prosocial behavior?”
- (2) “What could my team do over the next five years that will lead to resources that other scholars who study religion can take advantage of for years or even decades to come?”

Investigators who wish to obtain Landmark Grants, therefore, should keep two considerations in mind as they plan their projects. First, they should consider what sorts of studies they’d like to conduct. Second, they should consider how their work will advance the field, long-term and beyond the published findings themselves. A Landmark Project should generate new knowledge, of course, but it should also generate *new resources*.

What types of resources could Landmark Projects yield? They could yield new datasets that could be integrated with other existing datasets. They could establish longitudinal cohorts of people or institutions that could be followed for years or decades. They could lead to new tools for better ethnographic or archaeological work on religion and cooperation. They could establish new research sites or projects that are robust enough and future-minded enough to outlive the Investigators themselves. They could lead to new tools for manipulating or measuring culture. The call for the creation of new resources is a call for creativity and calculated risk-taking.

Applicants can propose Landmark Projects with budgets up to \$3 million, but they should keep in mind that SPARRC’s total budget for Landmark Projects is roughly \$4 million.

Methodology Workshop

A secondary agenda for SPARRC is to build community among scholars. To this end, in Summer 2025, we will hold our first annual Methodology Workshop in support of the SCORE Initiative. Our main goal is to expose researchers to ideas to improve the quality of their SPARRC research, but we also hope the workshop will, as a side effect, help to improve the rigor of research on religion in general (especially among younger scholars). PIs who receive Seed Grants must budget for travel, room, and board for the PI and at least one collaborator (preferably an early-career researcher) to attend the Methodology Workshop. (PIs may budget for additional members of their teams to attend as well.) The 2025 workshop will emphasize causal inference, though other topics will likely be covered also. Additional details are forthcoming soon.

Eligibility

The PI must have a PhD or equivalent terminal degree and must be affiliated with either (1) an accredited college or university, or (2) a recognized institution with academic interests (such as a research center or institute) before the research begins. A letter of institutional support must accompany full proposals. Applicants may submit only one application as PI or Co-PI, but may serve in other capacities (e.g., consultant, collaborator) on other proposals. Questions about these eligibility criteria may be sent to sparrc.rfp@gmail.com.

Application Process

Letters of Intent (LOI) for Seed Grants

Letters of Intent are due by June 17, 2024. All materials should be sent as a single PDF to sparrc.rfp@gmail.com. Put the words “Letter of Intent” in the subject line of your email. Applicants will submit the following materials:

- A **Letter of Intent** (LOI) that includes the central questions the Investigators hope to address in their Landmark Project—and in their Seed Project. The LOI should not exceed 1,500 words (references do not count toward this total). We recommend that PIs (a) describe the work they hope to conduct in the Seed Project; (b) name their likely collaborators; (c) describe how the project they hope to conduct would address the six priorities described herein; (d) describe the original scholarly research they hope to conduct during the Seed Project; (e) describe how the Seed Grant would improve the feasibility and impact of their Landmark Project; and (f) describe how the project, if eventually funded via a Landmark Grant, would create long-term value for the field.
- The **amount of funding requested** for the Seed Grant (a one-paragraph rationale is fine). No budget narrative is needed at this stage, but please do provide a paragraph giving a sense of the primary line items (e.g., salary for a postdoc, participant incentives).
- A complete **curriculum vita** for the PI and other central members of the investigative team (these can be modified later).

Full Proposals for Seed Grants

Full proposals for the Seed Grants are due by November 15, 2024.

Although we will provide details (and submission forms) later to teams who are invited to submit full proposals, applicants can expect that they will be required to include:

- A **cover letter** with the title, amount requested, duration of the project, and team members.
- A **project abstract** of up to 500 words that explains the project in a format that is suitable for public dissemination. Abstracts for funded projects will be shared publicly via websites or other promotional materials developed by SPARRC, the SCORE Initiative, or the Templeton Religion Trust.
- A **project description**, not to exceed 6,000 words (references do not count toward this total), that details the Investigators' vision for a Landmark Project, explains how the Seed Project would help them realize that vision, and the specific work they would undertake during the Seed Project. *It is vital that applicants describe a sound rationale for how their Seed Project would equip them to conduct a Landmark Project.* Investigators should also explain how the project would embody the six priorities enumerated above. They should also detail the publication that will result from the Seed Project.
- A **detailed budget** with a narrative that explains each line item. Indirect costs are limited to 15% of the total project budget. Grant funds cannot be used to purchase equipment that costs more than \$5,000.
- A **list of outputs** expected to result from the project, one of which should be a full proposal for a Landmark Project.
- An **outputs sharing plan** that describes how work products can be discovered, accessed freely, and built upon and reused by others.
- **Approval** of the department chair and the institution's signing officials.

Proposals for Landmark Projects

We will provide guidelines for submitting proposals for Landmark Projects in early 2026.

Timeline with Key Dates

Important Dates For Letters of Intent

June 17, 2024: PIs must submit Letters of Intent for Seed Grants by 11:59 PM Eastern Time.

July 1, 2024: PIs receive decisions on their Letters of Intent. We expect to invite approximately 20 PIs to submit full proposals for Seed Grants.

Important Dates for Seed Grants

November 15, 2024: Invited PIs must submit full proposals for Seed Grants by 11:59 PM Eastern Time.

February 1, 2025: PIs receive decisions on their full proposals for Seed Grants.

May 1, 2025: Seed Grants start.

Summer 2025: Methodology Workshop (The PI and at least one other collaborator must attend).

February 1, 2027: Seed Grants end.

Important (Provisional) Dates for Landmark Grants

September 1, 2026: Letters of Intent for Landmark Grants due (for new applicants only; all Seed Grant PIs will be advanced to submit a full proposal).

November 1, 2026: PIs receive decisions on their Letters of Intent for Landmark Grants.

March 1, 2027: Invited PIs, including Seed Grant PIs, must submit full proposals for Landmark Projects by 11:59 PM Eastern.

Project Leadership

Michael McCullough is SPARRC's Principal Investigator. McCullough is a Professor of Psychology and the director of the Center for Research on Experimental Evolutionary Psychology at the University of California, San Diego. As an experimental psychologist, he tries to identify the evolutionary and cognitive foundations of human sociality, with a special interest in understanding how and why we help each other, harm each other, trust each other, believe (and do) religious things, make moral judgments, and care what other people think about us.

Donnie Davis is SPARRC's Co-Principal Investigator. Davis is a Professor of Counseling Psychology at Georgia State University and he serves within the Matheny Center for the Study of Stress, Trauma, and Resilience. Donnie did undergraduate work at Yale and his doctorate at Virginia Commonwealth University. He completed his psychology pre-doctoral internship at Clemson University and is currently licensed in the state of Georgia. His research and clinical interests focus on human strengths and relational virtues, such as humility, forgiveness, and gratitude.

McCullough and Davis will be working with a diverse team of consultants from a variety of scientific disciplines to ensure that LOIs and full proposals are evaluated by reviewers with the requisite disciplinary expertise.

References

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complexity in Austronesia. *Proceedings of the Royal Society B*. B282: 20142556.<http://dx.doi.org/10.1098/rspb.2014.2556>.

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Willard, A. K., Shariff, A. F., & Norenzayan, A. (2016). Religious priming as a research tool for studying religion: Evidentiary value, current issues, and future directions. *Current Opinion in Psychology*, 12, 71-75.

Yarkoni, T. (2020). The generalizability crisis. *Behavioral and Brain Sciences*, 45, e1.

Methods to Improve Causal Inference in the Study of Religion

On longitudinal analysis:

VanderWeele, T.J., Jackson, J.W., and Li, S. (2016). Causal inference and longitudinal data: a case study of religion and mental health. *Social Psychiatry and Psychiatric Epidemiology*, *51*, 1457-1466.

VanderWeele, T. J., Mathur, M. B., & Chen, Y. (2020). Outcome-wide longitudinal designs for causal inference: A new template for empirical studies. *Statistical Science*, *35*(3), 437–466. <https://doi.org/10.1214/19-sts728>.

On confounder selection:

VanderWeele, T.J. (2019). Principles of confounder selection. *European Journal of Epidemiology*, *34*, 211-219.

On sensitivity analysis:

VanderWeele, T.J. and Ding, P. (2017). Sensitivity analysis in observational research: introducing the E-value. *Annals of Internal Medicine*, *167*, 268-274.

On selection bias:

Hernán, M. A., Hernández-Díaz, S., & Robins, J. M. (2004). A structural approach to selection bias. *Epidemiology*, *15*(5), 615-625.

On regression discontinuity:

Bor, J., Moscoe, E., Mutevedzi, P., Newell, M. L., & Bärnighausen, T. (2014). Regression discontinuity designs in epidemiology: causal inference without randomized trials. *Epidemiology*, *25*(5), 729-737.

On Instrument Variables:

Ertefaie, A., Small, D. S., Flory, J. H., & Hennessy, S. (2017). A tutorial on the use of instrumental variables in pharmacoepidemiology. *Pharmacoepidemiology and drug safety*, *26*(4), 357-367.

On propensity scores:

Greifer, N. (2023). Propensity Score Analysis: A Primer and Tutorial. Available at: <https://iqss.github.io/dss-ps/>

On mediation analysis:

Valeri, L. and VanderWeele, T.J. (2013). Mediation analysis allowing for exposure-mediator interactions and causal interpretation: Theoretical assumptions and implementation with SAS and SPSS macros. *Psychological Methods*, *18*, 137-150.

On computational models:

Lane, J., & Shults, F. L. (2021). The computational science of religion. *Journal for the Cognitive Science of Religion*, *6*(1-2), 191–208. <https://doi.org/10.1558/jcsr.38669>

Wildman, W. J., & Shults, F. L. (2024). Modeling Religion: Simulation the Transformation of Worldviews, Lifeways, and Civilizations (London: Bloomsbury).