The best universities in the world address and ultimately work to solve the world’s most pressing social and economic problems. Social science researchers at the University of Virginia have worked—and continue to work—individually at the cutting, quantitative edge of some of these issues, but institutional barriers have tended to militate against their ability to catapult their work into the broader public arena where it could have an impact nationally and more globally. The Quantitative Collaborative (QC) represents an opportunity to transform quantitative research and teaching in the social sciences at the University of Virginia and directly to shape public policy at the highest levels. By connecting researchers from across disciplines and schools, by providing undergraduate/graduate training and support for cutting-edge research methodologies, by attracting high-profile scholars and policymakers from beyond the University, and capitalizing on its proximity to seats of power in both Richmond and Washington, DC, the QC will serve to position the University of Virginia as both a shaper of the next generation of thinking in the social sciences and as an acknowledged leader in wider public policy debates.

How could a QC at the University of Virginia serve to attain these intellectual and broader societal goals? What sorts of quantitative research might it support? It could, for example, bring together economists and political scientists in the common utilization of field experimentation in order better to understand the consequences of factors such as political campaign strategies and formal institutional arrangements and thereby inform funding decisions at the national level. It could engage a range of experimental social and psychological researchers in the active incorporation of new and pioneering sampling technologies (such as those already under development at the University’s Center for Survey Research) in order to achieve superior coverage of telephone and internet surveys across all segments of the population and thereby better to inform public policymakers in their decision-making. It could also unite sociologists, statisticians, developmental psychologists, neuroscientists, and economists in the investigation of issues surrounding early childhood development and its effects on health and future economic success and thereby influence fundamentally how public health policy is set.

The Institutional Problem and Its Solution

The creation of a QC would help eliminate institutional barriers that have prevented collaborative work in the social sciences at the University of Virginia. First and foremost, it will define an organizational umbrella under which quantitative social scientists, regardless of department or school, will gather to pursue research questions of common interest. At present, quantitative social scientists may be found, one or two here, one or two there, in the College of Arts and Sciences in departments such as Economic, Politics, Psychology, and Sociology and in schools such as the Curry School of Education, the School of Medicine, the School of Nursing, and the Darden School. Whereas these social scientists have tended to be isolated from one another by the University’s often impermeable institutional structures, the QC would serve not only as a natural magnet for these researchers but also as a support system for the research they
pursue. The QC would do what the individual departments and schools cannot do, namely, provide strength in numbers. Quite frankly, the University has lagged behind peer institutions in its ability to secure outside funding in the social sciences because of its failure adequately to bring together quantitative social scientists. The QC would significantly enhance what the individual departments and schools are able to achieve by serving as a natural platform for future successful funding initiatives. It would also define the institutional nexus for influencing social and economic policymaking.

A QC, as its very name suggests, would foster and provide a natural locus for quantitative partnerships and interdisciplinary collaborations. Despite their relative isolation, some researchers at the University are managing to establish working groups. For example, the newly formed Political Psychology Group is an association of scholars from the Departments of Psychology and Politics in the College of Arts and Sciences, which has begun to explore new avenues of research such as the role of implicit attitudes in forming political judgments and policy preferences. Similarly, another new group of scholars from across the University, the Food Collaborative, has recently emerged to pursue their common research interests in agriculture, food policy, and sustainability. Both of these groups could potentially find a future home in the QC, which would provide critical guidance, support, and exposure.

The QC will have four core thematic areas: Data Analysis/Quantitative Methods, Mathematical Modeling, Experimental Social Science, and Data-Gathering Methodologies. The Data Analysis/Quantitative Methods area will encompass econometrics, quantitative political and sociological methodology, psychometrics, and statistical evaluation methods in education and public health. The Mathematical Modeling area will focus on formal (mathematical) models of economic and political behavior, drawing primarily on scholarship in Economics and Political Science. The Experimental Social Science area will focus on laboratory and field experimentation as it is currently practiced in Psychology, Economics, Political Science, and Anthropology. The Data-Gathering Methodologies area will encompass topics such as sampling and survey methodology. Through these focus areas, the QC will nurture nascent partnerships across the quantitative social sciences in the exploration of new avenues of research and in tackling key issues facing the modern world. It will serve as a nexus for building informal, interdisciplinary networks and for disseminating (to faculty and graduate students) the most recent advances in the field.

A successful Quantitative Collaborative will thus:

- provide instruction at the undergraduate/graduate level in quantitative methods,
- foster fundamental research in the quantitative social sciences,
- bring increased grant dollars to the University in support of such research,
- help shape key public policy issues, and, in so doing,
- bring greater visibility and recognition to the University as a national leader in the fields of social science.
The Contours of the QC

Year-to-Year Operations:

● The QC will coordinate an external speakers series which will bring in five major innovators in the areas covered by the QC.

● In order to foment cutting-edge research across the departments linked to the QC, the initiative will provide seed grants and summer research funding for faculty projects—ideally involving the participation of graduate students and undergraduates—linked to the core concerns of the initiative.

● The QC will facilitate interdisciplinary graduate training and research and solidify a sense of intellectual community across the (mathematically and statistically oriented) social sciences. Each department linked to the QC will nominate several students from amongst their ranks of incoming graduate students for a QC fellowship. The QC fellowships will have their own funding line and last for two years. In time, the QC would have the potential to offer actual graduate certificate programs in a variety of areas, such as survey methods.

● QC fellows will be expected to participate regularly in the QC seminar series described above and will make occasional presentations on topics falling under the rubric of “recent advances and innovations in social science methodology.” These presentations will be announced to the faculty and graduate students of all participating departments. The QC fellows will be given (shared) office space in the building which houses the QC.

● The QC will host at least one dedicated post-doc—to be selected on a competitive basis—who will pursue his or her research agendas in conjunction with associated faculty and graduate students.

● Semester- and year-long visitors from other institutions will enhance the expertise of the collaborative.

Leadership and Administration:

● A faculty steering committee—with an elected chair—consisting of members of each of the participating departments and/or schools will be required to select students for the fellowship program from among those nominated, choose post-docs and visitors, organize the speaker series, and oversee the grant competitions. Appropriate course release and/or salary support should be provided to incentivize participation in such a committee. The composition of the steering committee should reflect all four of the core areas of interest of the QC.

● A Managing Director will handle the business/financial—as opposed to the intellectual/programmatic—aspects of the QC.

● A full-time administrator will handle the day-to-day issues of scheduling, etc.

● One or more statistical programmers will be charged with assisting researchers in the production of open source software for statistical applications and providing general statistical consulting for students and faculty.