UBC SPARC Resource

NFRF Climate Change: Sample Governance Plans

Last updated on May 26, 2023 for the <u>2023 International Joint Initiative for Research in Climate Change Adaptation and Mitigation</u> competition.

Attached are five sample Governance sections from funded UBC applications to the SSHRC Partnership Grant competition. Importantly, these grants are of a similar size and scope to the NFRF Climate Change competition, and could provide inspiration for elements of the Management plans section of the 20-page Proposal. Please keep in mind, however, that the competitions have different requirements, therefore not all content may be applicable.

SSHRC strongly encourages applicants to include a diagram to illustrate the governance structure, with key topics including:

- choice of management/governance and leadership arrangements in the design and conduct of the
- research, research training, and/or research-related activities;
- participation of team members, partners, etc. in the governance structure;
- accountability and decision-making authority;
- decision-making process, including involvement of other institutions/partners; and
- how issues will be resolved.

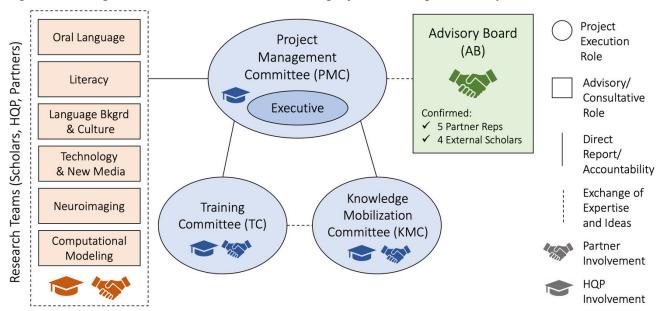
The NFRF Management plans instructions state:

- Describe how various aspects of the project will be managed, including:
 - o governance/management approach (how the project will be managed and the grant administered);
 - performance measurement plan, including risk assessment and management and results frameworks (how achievement of short-, medium- and long-term anticipated outcomes will be monitored and assessed according to established indicators and timelines; mitigation plans);
 - data management (how research data from the project will be managed and safeguarded; for guidance on research data management considerations to include in the research proposal, refer to the NFRF Research Data Management page); and
 - training (the training, development and mentoring plan for students and other highly qualified personnel).

Governance

Approach: Given such a large and diverse partnership team – involving 20 non-academic partner organizations, 32 scholars, and at least 25 graduate and postdoctoral trainees each year – we have devised a robust and effective governance plan that not only incorporates all participant types, but leverages their diversity to empower multiple perspectives in decision-making. Importantly, our partner organizations will be involved at all levels: they will shape the project's overall direction and goals by working closely with individual research teams on projects of particular relevance to their mandates, as well as by participating on the Advisory Board. They will also shape the project's training and knowledge mobilization plans by engaging in the committees overseeing each.

Structure: We propose a governance structure, illustrated below, that balances decentralized and centralized leadership. The research itself is managed in a decentralized manner on a day-to-day basis, by six collaborative teams across individual study sites. The project's other core activities (e.g. strategic planning, financial management, training, knowledge mobilization) are centrally managed by committees with specific foci: Project Management Committee (PMC), which includes an Executive; Training Committee (TC); Knowledge Mobilization Committee (KMC); and Advisory Board (AB). The first three, in blue, are management units that oversee the execution of project tasks. The latter, in green, is a consultative unit that provides expertise to the others. Our six research teams, in orange, share expertise amongst themselves, lead their own sub-projects, and report directly to the PMC.



Roles: The PMC manages the many administrative demands of the Partnership, and is the overall decision-making entity. It is composed of a three-member Executive, five Management Leads, and one Trainee Member. The Project Director (Werker) and two Co-Directors (Deacon, Fyshe) make up the Executive, and have final decision-making authority on all aspects of project management, including allocation of funds and the involvement of participants (scholars, partners). In the case of conflicts among team members, the Executive may mobilize quickly and vote amongst themselves to resolve issues as they arise. One or more members of the Executive will attend each Advisory Board meeting. Management Leads are each responsible for a particular aspect of project administration. They interface with the other committees, research teams, and partner organizations, and report back to the Executive and/or the PMC as appropriate (see below). These will be year-long appointments with the option to either renew or to rotate among Co-Leads (excluding the Executive). Some Management Leads may retain their positions to prevent complete turnover each year. Role assignments will be determined annually via discussion among the PMC. The TC will nominate one HQP member each year to sit on the PMC as a Trainee Member, charged with being the 'voice' of the project's HQP. The PMC will meet monthly via videoconference and annually in-person. The roles of the Management Leads are as follows:

- 1. **Financial Lead** Coordinate the transfer of funds to co-applicants' institutions; work with partner institutions' Financial Services to ensure annual reports are received; ensure spending is in line with budget; evaluate requests for new fund allocations; advise the Executive regarding the re-allocation of unspent funds; and oversee financial reporting to SSHRC. Rvachew will be Financial Lead in Y1.
- 2. **Research Lead** Coordinate research activities of all participants; communicate regularly with the project sub-teams to ensure research milestones are being met, and if not, identify causes and cocreate solutions; gather annual research progress reports from sub-teams and present to the PMC; and prepare progress reports for SSHRC. Thomson will be Research Lead in Y1.
- 3. **Partner Relations Lead** Engage in regular dialogue with partners to solicit info and feedback; provide project annual reports to partners; attend AB meetings (along with the Executive) and devise strategies for best implementing their advice; evaluate requests for new partners and advise the Executive accordingly; and provide quarterly updates to the PMC. Turin will be PR Lead in Y1.
- 4. **Training Lead** Chair the TC; oversee the equitable financial support of students; seek new trainee funding opportunities; lead training initiatives, including management of the exchange program; review requests for student travel funding; and support trainee network by facilitating communication via tools like Slack. Chen will be Training Lead in Y1.
- 5. **Knowledge Mobilization Lead** Chair the KMC; oversee all SSHRC-funded KM activities; manage the distribution of KM funds; and facilitate communication with the TC (given that HQP will be deeply involved in KM) and with the PMC. Curtin will be KM Lead in Y1.

The **Training Committee** (TC) will oversee and coordinate training opportunities across the project's study sites, including the Exchange Program; Mitacs internships; and annual Trainee Workshop. Chaired by the Training Lead (Chen in Y1), this committee will involve two other Co-Leads (Abdul-Mageed and Joanisse in Y1); four partner reps; four HQP; and two other academic team members (co-applicants and/or collaborators). The TC will plan the annual Trainee Workshop, as well as adjudicate applications for exchanges (funding from the UBC Language Sciences and others) and travel to conferences (funding requested from SSHRC). The TC will also seek other funding opportunities to increase the budget allocation. It will meet quarterly, including an in-person meeting at each annual Trainee Workshop.

The **Knowledge Mobilization Committee** (KMC) will facilitate integrated knowledge translation among partners, researchers, and the community. It will support the development of research networks and tools to assist the research teams in making their outputs readily accessible to non-academic audiences. Chaired by the KM Lead (Curtin in Y1), the KMC will involve two other Co-Leads (Newman and Yeung in Y1); four partner reps with expertise in outreach; four HQP; and two other academic team members (co-applicants and/or collaborators). The KMC will determine allocation of the funds already budgeted for KM activities, and will seek funding opportunities to increase the allocation. Like the TC, the KMC will meet quarterly, including in-person at each annual Team Meeting.

The **Advisory Board** (AB) will provide invaluable expertise and advice to the PMC. Four prominent scholars with expertise in one or more of the project's core themes have accepted our invitation to participate in this capacity: Drs. Aslin, Crago, Verhoeven, and Wolf. The AB also comprises large representation from across our primary partners, including Dostie Proulx of *Altissia*; Barbour of *NIRx*, Mannix of *DIVERSEcity*, Rivard Dexter of *Squiggle Park*, and Siller of the *Canadian Children's Literacy Foundation* (all confirmed and included in this application as Collaborators). The AB will review summaries of other Committees' monthly or quarterly meetings, and will meet once annually with the Executive and PR Lead to discuss progress and future goals. Individual members of the AB may be consulted as needed, based on their expertise, by research teams and committee members.

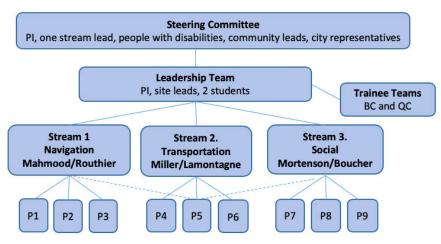
Host Institution: UBC, via Project Director Werker, is ultimately accountable for the appropriate and effective use of the funds provided by SSHRC and partners. The two Co-Directors, as well as the reporting structure of the governance committees, will greatly assist in this endeavor. UBC has demonstrated its enthusiastic support with commitments of \$490,000 cash and \$252,740 in-kind.

Example #2

Towards Barrier-Free Communities: A Partnership for Improving Mobility, Access and Participation (MAP) Among People with Disabilities

GOVERNANCE:

Our governance structure is shown in the figure to the right. PI Mortenson is ultimately accountable to the host institution and to SSHRC to ensure that the project operates on-time, onbudget, and adheres to all SSHRC guidelines and principles. deliberately created our governance, leadership. and management structure to provide for meaningful academic and non-academic representation at all levels. This plan



is vital to ensure a balance of power and influence by facilitating shared decision-making, development of community-driven research questions, co-learning, co-mentorship of trainees, and co-ownership of the research process and products. We will hold bi-annual site meetings at both the BC and QC sites, which will include the PI, co-applicants, trainees, collaborators, and other project members. By meeting twice a year, we will ensure that we maintain the project momentum, prioritize projects (based on partners' changing needs), strengthen connections among academic and non-academic team members, and develop cross-stream collaboration. By meeting at each site, we will limit travel expenses. By promoting ongoing communication and collaboration, these meetings also will enable us to reduce disagreements proactively. Below, we explain accountability, reporting, and decision-making authority within our governance structure, describe the nature of team members' involvement in governance, and highlight involvement of key partners in the decision-making process.

The **Steering Committee's** mandate is to provide the overall strategic vision, ensure equity between sites, streams, and projects, and monitor the health of the Partnership. The Steering Committee will ensure the Partnership meets the needs of people with disabilities (e.g., considerations of short- and long-term impact of the projects, policy implications). The Steering Committee will include the PI, one annually rotating stream lead (academic), our two community partner site leads (D'Souza and Collomb D'Eyrames), a municipal partner from each site, and people with disabilities from both sites. The Steering Committee will meet three times per year.

The **Leadership Team** will enact the Steering Committee's vision for the project and will ensure overall accountability and budgeting. The Leadership team will include the PI, the academic stream leads, and two students (one from each site). The student members will rotate on an annual basis. Leadership Team meetings will be held every other month via teleconference.

Each **Stream Committee** (x3) will oversee the planning, development, and implementation of research activities, as well as ensuring the overall excellence of the stream's research projects. The Stream Co-Leads (Mahmood/Routhier, Miller/Lamontagne, Mortenson/Boucher) are accountable to the Steering Committee and Leadership Team. Each Stream Committee will include the Stream Co-Leads, trainees, and the research coordinator assigned to support that Stream). Stream committee meetings will be held every other month via teleconference.

Each **Project Committee** (9+) will be responsible for implementing all stages of the research project. The committee will report to the project's respective Stream Committee. The Project Committees will be supported by a student research assistant (to schedule meetings, distribute agendas, record minutes). Each Project Committee will include site-specific project academic leads, students, and relevant partners and collaborators who will provide expertise on key aspects of the research projects. This structure consolidates relevant research activities at a project level and facilitates a flow and exchange of knowledge. At the beginning of each project, all team members will negotiate the conditions of

Towards Barrier-Free Communities: A Partnership for Improving Mobility, Access and Participation (MAP) Among People with Disabilities

their participation, engagement, and roles and responsibilities to collaboratively create a project contract. Each Project Committee will meet monthly.

Each **Trainee Team** (2) which will be responsible for planning and conducting regular site-specific trainee meetings, organizing trainee events, nominating student representatives to the Leadership Team, and providing regular feedback through that representative to the Leadership Team.

Partnership Assessment We will use social network analysis1 to assess the Partnership's success at fostering relationships among members, to monitor the level of reciprocity in partnership relationships, and to assess the equity of the power distribution at both a stream and cross-stream level. This framework will enable us to evaluate the structure and strength of ties between Partnership actors. The outputs of social network analysis include both statistical and visual portrayals of networks. The model includes variables as "network density" (the interconnectedness of network actors), "relational reciprocity" (an indicator of hierarchy), and "centrality" (which provides an indication of social power within a network). Members of the stream committees will be asked to rate their working relationships by rating their tie level according the criteria in the table below. The results of the ongoing social network analysis will be discussed by the Steering Committee and used to develop strategies to strengthen the Partnership.

Tie level	Tie definition		
Absent	I am not aware of the work that this this		
	person is doing		
Awareness	I am aware of the work that this person is		
	doing but our work is entirely independent		
Communication	I actively share information with this		
	person as I work towards my own goals		
Cooperation	I actively share information, adjust my		
	plans and work in ways that are		
	complementary to this person		
Collaboration	I actively share information, and we plan		
	and work together towards shared goals		

Decision making. Wherever possible we seek to make decisions by consensus. This approach does not mean that everyone has to agree with a decision, but rather does ensure that everyone feels heard and can live with the outcome of a decision. Decision-making is facilitated by clear goals and objectives. Therefore, we endeavor to be clear and precise about what we are trying to achieve; specifically, about what knowledge we are seeking to discover and disseminate.

Conflict Resolution. Our structure facilitates proactive (rather than reactive) responses to potential conflicts. Bi-annual meetings at each site will provide a forum for cross-site, cross-stream, cross-project conversations. Negotiating roles and relationships at the beginning of this project, in a manner that encourages candor and trust, will reduce potential future sources of tension. Therefore, not only will each project team develop a project contract that outlines individual roles and expectations within each team, but the Steering Committee will also develop Partnership-wide authorship guidelines to inform decisions around authorship and intellectual property. Funding is allocated approximately 60% to the Vancouver site and 40% to the Quebec site (with Vancouver receiving slightly more as the site is responsible for overall project administration), with the goal of reducing conflict by providing fair distribution of resources. In addition, other structures will be designed to discourage conflict over resources. For example, students at each site will be able to apply for travel funding. If the applications exceed the budget, they will be adjudicated by a committee composed of Partnership members from the other site. In all instances, we will function in a collaborative manner; however, we understand that some conflicts are unavoidable. Within Stream Committees, Stream Leads will first attempt to resolve issues/conflict through consensus decision-making. If that fails, the issue will be brought to PI who will seek expert-opinion from the Steering Committee and/or from UBC (for financial-related issues).

Involvement of the Host Institution. UBC holds responsibility for financial oversight of the project and ensuring all financial guidelines and reporting requirement of SSHRC are met. UBC will provide support through the Office of Research Services, which helps researchers to achieve compliance when funded, and to open a research account. UBC Research & Trust Accounting will be responsible for ongoing financial administration, including financial reporting and revenue collection.

Governance Strategy and Structure

We have created a management and governance structure (see Figure 1) that serve the focus of our research design, training needs and research related activities in a practice-scholarly nexus to support the optimal functioning of the *Global Journalism Innovation Lab/Lab Mondial d'Innovation en Journalisme* and our collaborations with partners nationally and internationally. The success of the PG hinges on our working partnerships, which are organized around concrete objectives and time-sensitive outcomes. These Working Groups in the structures will be finalized and start meeting within three months of notice of funding. The governance structure is organized to ensure that all of our partners from our 6 research themes (Journalism Innovation and Media Startups, Indigenous Media Engagement, Public Engagement, Policy Implications, Historical Innovation in Explanatory Journalism and Global Comparative Analysis) and The Conversation Canada (TCC) editorial team are well positioned to manage our research agenda and explanatory journalism practice, production and innovation objectives with the greatest clarity and integrity possible.

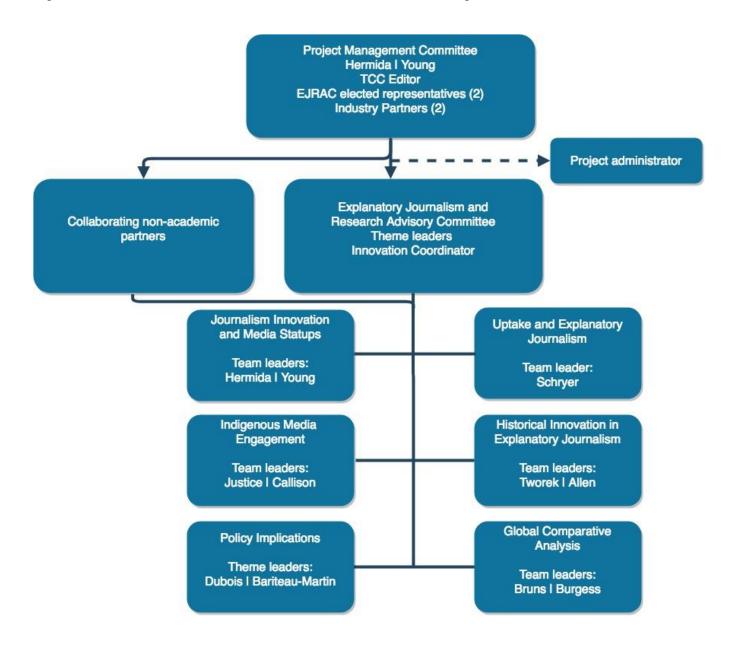
Involvement of key partners and host institution (see Figure 1)

The Working Groups are organized around six research themes, which we have identified as key conceptual and practice concerns, data, practical knowledge and tools from the literature on disciplinary knowledge and expertise, explanatory journalism and innovation. The working groups will be chaired by an academic team lead(s), who are experts in their research areas and have experience in knowledge mobilization, journalism and managing large research projects. Each of our 5 academic partner organizations is represented in all 6 themes. Our journalism and industry partners are integrated in each theme depending on their interests and the focus of the theme, to ensure optimal research design, training and execution of research-related activities. (See Project Goals and Description for a thorough breakdown of partner collaborations and contributions by theme).

The research theme leaders plus the Lab's Innovation Coordinator will participate in an Explanatory Journalism & Research Advisory Committee (EJRAC) that will coordinate and share relevant information, manage our timeline of objectives and perform a senior decision making function. EJRAC will meet quarterly over teleconference (including once in person at the annual meeting) to assess progress. The entire project will be managed by a Project Management Committee, which is comprised of representatives from all levels of the governance structure and a combination of academic, journalism and nonprofit partners, including the TCC editor. Financial planning, risk mitigation and conflicts will be addressed and resolved by the Project Management Committee.

The Conversation Canada is integrated as our key partner organization at all levels of governance in order to participate in decision-making about research, innovation and journalism-related activities. In addition, TCC has its own internal governance structure to support practice and production of high quality academic journalism. TCC is incorporated as a nonprofit society, with a Board of Directors representing the journalism and higher education sectors, and an Editorial Committee, in the process of being created, composed of academics and senior journalists. Both Drs. Hermida and Young sit on the TCC Board of Directors, which is currently a small working board of four people from the higher education sector. The Board is in the process of being expanded to seven board members, and Hermida intends to step off the TCC board should this PG be successful, in order to avoid conflict of interest as PG Director. TCC's Editor participates in an ex-officio capacity on the board. Finally, both the Partnership Grant research program and TCC will adhere to the global The Conversation editorial charter (http://theconversation.com/ca/charter). The editorial charter is focused on areas of concern grounding this PG, which include evidence-based information and knowledge mobilization of academic research as well as working with academic, industry and government partners.

Figure 1: Global Journalism Innovation Lab Governance and Management Structure

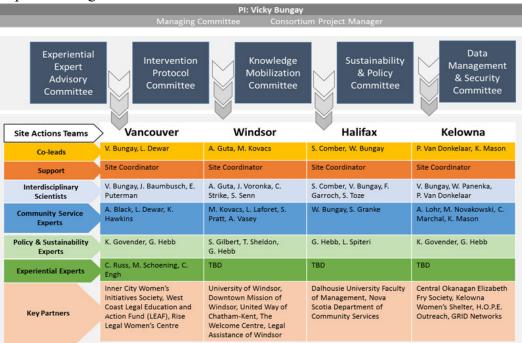


As TCC is a separate non-profit, we are in the process of finalizing legally binding agreements from TCC and its nonprofit umbrella organization based in Melbourne, Australia (The Conversation Media Group) for access to research data required to complete the PG. TCMG has supplied a letter of support to demonstrate evidence of its commitment to the Partnership. As the host institution, the University of British Columbia will be supporting this partnership with a total confirmed contribution of \$528,000 over six years. This contribution includes a total \$180,000 cash commitment from the Vice President Research & Innovation and Faculty of Arts. Additionally, the UBC School of Journalism has confirmed commitments of \$30,000 cash and \$318,000 in-kind, which include faculty (teaching release) and undergraduate and graduate student time, as well as in-kind facilities, equipment and staff services and training to support program activities.

Example #4

GOVERNANCE

The organization and governance of a complex, interdisciplinary, intersectoral group requires good communication among team members and partners, coordination for timely achievement of milestones and deliverables, maximizing both academic and applied goals, and recruitment of the number of participants needed for each study. To set up the proposed projects for success, we put together a formal partnership that combines research expertise with groups that have a history of working with women and youth affected by violence, already have formal ties to each other or formal partnership arrangements, along with a proven track record of working together successfully. The governance structure is co-creative, participatory and inclusive of researchers, partners, women affected by violence, and co-applicants. The proposed governance structure is depicted in Figure 1.



To oversee design, planning and implementation of each of the case studies, 4 site action teams have been assembled to include at least one: a) interdisciplinary scientist with expertise in intervention research, b) interdisciplinary scientist with expertise in gender-based violence, c) public and not-for-profit service experts, d) partner organization with a commitment to aid in recruitment, knowledge translation efforts, or service integration evaluation, e) a policy and sustainability expert, and f) woman as an experiential expert. In keeping with participatory research, each action team is co-led by a researcher and one co-applicant from a partner service organization. Researchers and other co-applicants with service delivery expertise are listed in more than one stream to ensure that the expertise, design details, findings, and problem solving will be shared across the separate projects during bimonthly meetings. These structural elements allow for greater integration across this multifaceted project. All resources, for instance study materials, meeting notes, and articles, will be accessible to all research teams via the multi-user communications platform housed within the PIs research unit (www.capacitycentre.ubc.ca). Site action team co-leaders hold responsibility for managing and accounting the budget portion relevant to their site activities. At the start of each funding year, they will specify the goals. They will provide quarterly reports on their progress to the PI and the Consortium Project Manager and PI. The PI will bring these reports and outstanding issues to the Managing Team (discussed below). Site action team co-leads will also distribute these quarterly reports to their team

members and partner organizations and invite input and advice on outstanding issues for discussion. Annual, video-conference meetings of the research team and core partners will be held to chart the progress of each case study, address challenges as they arise, and plan for the dissemination of emerging findings.

We have constructed five consortium committees to facilitate fidelity of the outreach model being tested across sites, partnered approaches to knowledge mobilization, centralized data management and security, and experiential expert advising. Each consortium committee is led by content experts. The consortium committees will have quarterly videoconference meetings. One member of each committee will attend a quarterly management meeting. In year one the this Management Committee will be chaired by Bungay and be comprised of consortium committee leads Guta, Comber, Vlasblom and Schoening. Over the subsequent six years Bungay will remain chair and the consortium committee leads will rotate every two years to support broad distribution of knowledge and oversight, providing more democratic input as well as protection against potential attrition should a team member leave the consortium. The managing committee will have quarterly conference calls to discuss project reports, HQP training goals, and to collaboratively resolve challenges that arise. In preparation of these meetings the consortiums project manager will survey team members and partners about issue to be added to the agenda for discussion and resolution. The Experiential Expert Advisory Committee will be made up of women who have experienced violence and 2 community service experts (Angie **Lohr**,) who are able to provide support and mentorship to the experiential experts in this leadership role. Initially the national group will consist of the Vancouver CAC as they have a well-developed and sustained committee with expertise in determining CAC terms of reference and assisting site action teams to tailor the intervention to the local context. This expert advisory committee will assist the site action teams to develop local CACs and recruit new members to the larger advisory committee. Community service experts will rotate every two years to include other co-applicants. The **Intervention Protocol Committee** made up of four intervention research experts (Bungay, Putterman, Baumbusch, Strike), one sustainability expert (Sheldon) and two service expert (W. Bungay, Laforet) will serve to finalize the intervention protocol instruments and procedures and support the site action teams to implement the outreach protocol as detailed in the Project Description. As per other committees team members will rotate every two years. The Knowledge Mobilization Committee will be made up of one co-applicant from each case study, two sustainability co-applicants and two partner representatives. The membership of the committee will be determined on a 2-year rotating basis. This committee will set annual goals and timelines at the beginning of each funding year and provide the PI and Consortium Project Manager quarterly reports to chart their progress towards these goals. This committee will be charged with creating infographics, intervention manual detailing best practices on the timeline specified in the Knowledge Mobilization Plan. The committee will also assist the Consortium Project Manager in planning the two Knowledge Mobilization Workshops in years 1 and 7. The Network security specialist partner, GRID Networks Inc. (Vlasblom) will oversee the Data Management and Security Committee for years 1 and 2. They have extensive expertise in these complex, multi-user networks and will work collaboratively with all partners to support training for this data management system. As the project unfolds, other HCQ will assume leadership role. The Policy and Sustainability Committee will lead the PES project activities and be comprised of management science and policy experts who will work collaboratively to design and implement the program evaluation matrix across all sites.

Governance

The organization and governance of a complex, interdisciplinary, and intersectoral group requires clearly defined channels of communication among team members and partners. Good governance also requires clear timetables for achievement of milestones and deliverables, efforts to maximize both academic and applied goals, and the timely recruitment of the large numbers of participants needed for each study. To meet these challenges, our consortium brings together team members and partners who already have ties to each other and/or a history of successful formal partnership arrangements. Importantly, all share a common vision of the key questions to be asked and methodologies to be employed. The proposed governance structure is depicted in Figure 1.

Figure 1. Governance Structure

Expert Advisory Board	PI: Schmader Managing Committee Consortium Director			Industry Relations Committee	Knowles 2 Socia 1 Partner
	CLIMB	PRISM	SINC	RISE	l i a le
Leaders	Baron	Spencer & Wells	Croft & Page-Gould	Bergsieker & Schmader	TO
Support	Project Manager	Project Manager	Project Manager	Project Manager	Mobilization entists, 2 STE , 1 HQP from
Social Scientists	Fehr, Schmader, HQP	Baron, Bergsieker, Wright, HQP	Kang, Spencer, Wright, HQP	Fehr, Kang, Page-Gould, HQP	II II -
STEM Experts	Staub-French, Wells	Shannon, Staub-French	All STEM Experts	Condon, Croft, Shannon	exp ach
Key Partners	Science World, Actua, ESQ, Geering Up, EC, ECL, ONWIE, SCWIST, NSERC Chairs	Science World, Actua, ESQ, Geering UP, CIM, PCL, ONWIE, SCWIST, EC, ECL, NSERC Chairs	University Partners, EC, ECL, ONWIE, SCWIST, NSERC Chairs,	WinSETT, EC, ECL, MiHR, SCWIST, Mozilla, General Motors, Simba, Teck, TRIUMF, NRC	Committee VI experts, each project

To oversee design, planning, and implementation of each project, four teams have been assembled to each include at least one: (a) social scientist with expertise on social identity threat, (b) social scientist with expertise on bias reduction, (c) expert in STEM with a track record of relevant outreach efforts, and (d) partner organization with a commitment to aid in recruitment or knowledge translation efforts for clearly specified age groups. In addition, each team is led or co-led by team members with an existing connection to at least one relevant partnering group (e.g., **Baron** and Science World; **Wells** and ONWiE, **Page-Gould** and U of Toronto Engineering; **Croft** and WinSETT, Engineers Canada). Researchers are listed in more than one adjacent developmental stream to ensure that expertise, design details, findings, and problem-solving will be shared across the separate projects during team meetings. In 2016, as part of the knowledge mobilization from our current Partnership Development Grant, we began a shared online resource of study materials, meeting notes, and articles accessible to all research teams. These structural elements allow for greater integration across this multifaceted project.

Team leaders hold responsibility for managing and accounting the portion of the budget relevant to the project. They will specify yearly goals at the start of each funding year and will provide triannual reports on their progress toward those goals to the PI, Managing Committee, and Consortium Director. Individual project managers will also distribute these triannual reports to their team members and partnering organizations and invite any input and advice on outstanding issues for discussion or development. Annual in-person meetings of the research team and core partners will be held to chart the progress of each component of the project, design new methods, and plan for the dissemination of emerging findings in peer-reviewed journals, open access special issues, and popular press outlets.

Managing Committee. The Managing Committee will be a four-person committee that includes one person from each Project. In Year 1, this will be the PI (Schmader-RISE), and three Project Leaders (Baron-CLIMB, Spencer-PRISM, Page-Gould-SINC). In the subsequent six years, Schmader (the PI) will remain as chair; another co-applicant from each project stream will rotate onto the managing committee for a two-year term. In this way, knowledge and oversight is distributed broadly, providing more democratic input as well as protection against potential attrition should a team member leave the consortium. The managing committee will have triannual conference calls to discuss project reports and progress, HQP training goals, and to collaboratively resolve challenges that arise. In preparation for these meetings, the Consortium Director will survey team members and partners about issues to be added to the agenda for discussion and resolution.

Expert Advisory Board. An Advisory Board of academic and STEM experts will represent the various scientific approaches and outreach efforts proposed. The members include: Mark Abbott, P. Eng., MBA is the portfolio manager of the Engineering Change Lab. Mahzarin Banaji, Ph.D. is the Richard Clarke Cabot Professor of Social Ethics at Harvard University, co-creator of the Implicit Association Test, and expert in implicit bias research. Geoffrey Cohen, Ph.D., is the James G. March Professor of Organizational Studies in Education and Business at Stanford University and is an expert in longitudinal social psychological intervention research. Thomas Coyle, Sc.D. is the Vice Dean of Undergraduate Studies in the Faculty of Applied Science and Engineering at the University of Toronto. Valerie Davidson, Ph.D. is Professor Emerita in Engineering at the University of Guelph and a former NSERC Chair for Women in Science and Engineering serving Ontario. Andrew Meltzoff, Ph.D. holds the Job and Gertrud Tamaki Endowed Chair at the University of Washington and is a leading expert in social cognitive development. Marisa Sterling, P.Eng. is the Assistant Dean, Inclusion and Diversity, at the Lassonde School of Engineering at York University. The advisory board will be invited to review annual progress reports, attend the Knowledge Sharing Conferences, and will offer their expertise during bi-annual online progress meetings as well as in more targeted discussions.

<u>Industry Relations Committee.</u> An industry relations committee made up of three STEM experts (**Croft, Shannon, Wells**) will serve as a liaison to new and existing industry partners. Their expertise and contacts will be particularly invaluable to the feasibility and success of data collection and knowledge mobilization efforts for Projects SINC and RISE. Specifically, they will reach out to industry leaders with an interest in the project to make direct invitations to join the consortium. They will also work with the PI to resolve any specific conflicts that might arise, specifically related to Project RISE. Dr. Shannon will Chair this committee in Years 1 and 2. The Industry Relations committee will meet via conference call bi-annually, or as required, to resolve any industry-specific coordination challenges.

Knowledge Mobilization Committee. A knowledge mobilization committee will be made up of one Co-Applicant from each project (2 social scientists, 2 STEM experts) and one partner representative with expertise in outreach efforts and/or science education. The committee will also include one HQP from each project whose role as a Mitacs funded intern will include the mission of translating findings for broad distribution. The membership of the committee will be determined on a 2-year rotating basis. The Knowledge Mobilization Committee will set annual goals and timelines at the beginning of each funding year and will send to the PI and Consortium Director triannual reports to chart their progress toward these goals. This committee will be charged with creating infographic and video white papers (SINC, RISE), interactive science exhibits and activities (CLIMB, PRISM), and best practices toolkits (all Projects) on the timeline specified in the Knowledge Mobilization Plan. The committee will also assist the Consortium Director in planning the two Knowledge Mobilization Workshops.