International Science Reserve

Scientists without borders

New York Academy of Sciences



International Science Reserve at the New York Academy of Sciences

IBM-NYAS: a mission-driven partnership

Bringing together limited and specialized scientific, technical and human resources from across the globe to prepare for and mitigate complex and urgent global crises, providing rapid solutions, accelerating new discoveries, and supporting scientifically informed decision-making.

The ISR increases the capacity for response by:

- accelerating and augmenting response efforts by facilitating additional access to specialized scientific human and technical resources
- conducting scenario planning exercises to increase preparation and anticipation of impacts
- convening and coordinating scientists from around the world to **build institutional memory** in crisis management and response

How the ISR fits:

There are organizations that focus on specific crises as well as those that address multiple threats. However, the value of the ISR is its singular focus on mobilizing scientists from around the world to augment existing response organizations that are addressing complex global crises, in whatever form these may take.

ISR@NYAS: Key Features

- Critical scientific, technical and human resources provided **pro-bono** by Member individuals or institutions
- A network of expert communities organized by scientific discipline
- Projects proposed by scientists (requests for collaboration, resources, etc.) vetted and matched with critical resources.
- Limited/no contracts or other written obligations between participants to encourage collaboration
- Prepare, Respond (crisis declared), and Recover states which entail different activities

The Role of the ISR

Prepare

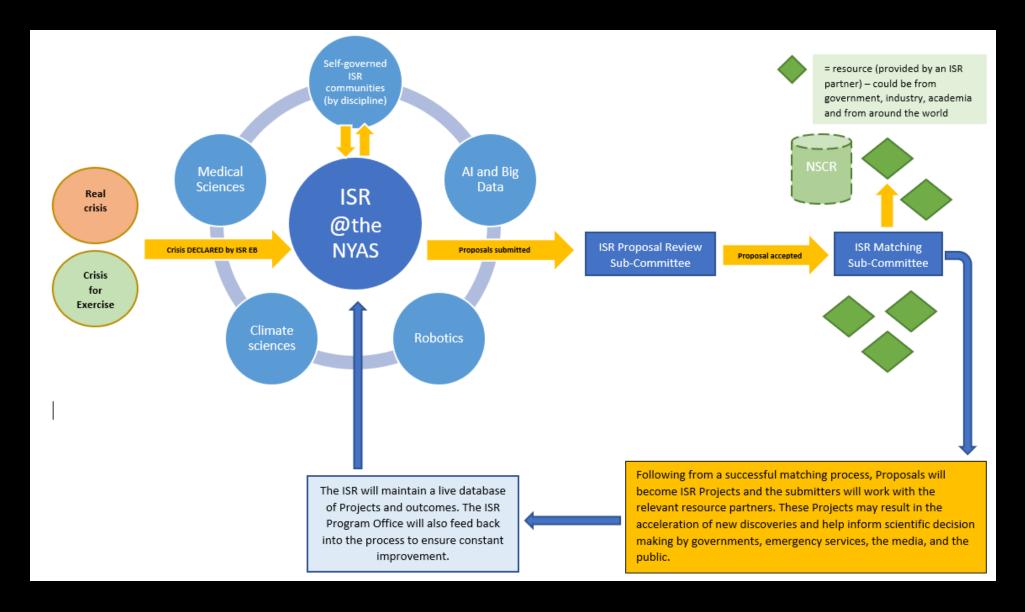
The ISR will convene borderless groups of scientific experts participate in scenario planning exercises with the results and findings shared with key stakeholders. By surveying and understanding the gating resources (limiting factors) in crises, this will increase the knowledge of anticipated impacts from crises across the world.

Respond

The ISR will facilitate additional scientific researcher access to specialized resources, enabling relevant projects to contribute to disaster relief efforts more quickly. These projects may result in the acceleration of new discoveries and/or help inform scientific decision-making during a global crisis.

Recover

The ISR will maintain ongoing engagement with the interdisciplinary communities, facilitating crisis response evaluation exercises to build up collective and institutional memory and convening scientists to address relevant research gaps.



ISR@NYAS: Crisis Declaration and Proposal Submission Process

ISR@NYAS: Year 1 Timeline

Phase I: May-August 2021

Phase II: September – December 2021

Phase III: January- March 2022

Phase IV- April - May 2022

- Establish program office at the Academy
- Begin to recruit partners and members
- Set up governance structure
- Begin to identify potential ongoing funding sources
- Begin landscape analysis
- Plan for readiness exercises
- Identify potential ongoing funding sources
- Recruit partners and members
- Develop incentive programs to maintain engagement
- First Executive Board meeting
- Identify initial crisis
- Launch the ISR (Jan 2022)
- Secure funding for ongoing operations past April 2022
- Build communities
- Conduct readiness exercises

• Assess performance and develop an improvement program