

NISS

Strategic Vision

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Overall Vision

- NISS is a truly national institute that serves the statistical sciences community by
 - Performing and stimulating high-impact research at critical interfaces between statistics and disciplinary science, as well as between industry/government and academia
 - Supporting career development at all levels, with special emphasis on postdoctorals
 - Engaging the national community in a variety of activities, especially but not exclusively by means of its Affiliates Programs and SAMSI

Research Vision

- NISS research
 - Is targeted at interfaces
 - Between the statistical sciences and disciplinary sciences
 - Between industry/government and academia
 - Responds to national needs as well as issues raised by Affiliates
 - Is a mixture of long-term involvement and shorter-term explorations subsequently taken up by others
 - Is of the highest quality and impartiality
 - Leverages NISS' partnership with SAMSI to increase community participation and impact

Research Vision: Sub-Themes

- Three principal kinds of projects
 - Cross-disciplinary bridge building (the “traditional” NISS mission), driven by scientific needs and funded principally by disciplines other than statistics
 - Research addressing industry/government-academia interfaces, such as data confidentiality and data quality
 - Problems brought to NISS, either in relatively inchoate form (for example, data quality in 2000) or relatively specific form (for example, the 2004 NCES dropout task force)

Research Vision: Sub-Themes—2

- Research becomes more diverse in terms of
 - Scientific scope
 - Institutional “homes” of PI’s and other participants
 - Geography
- Current strengths are maintained
 - Adaptability, flexibility, responsiveness
 - Ability and willingness to assume risks
 - Ability to devote resources to project and proposal development
 - Ability to assemble the “best” teams, drawn from the entire community

Human Resources Vision

- Through its research projects and other activities, NISS offers unique career development opportunities for statistical scientists at all levels:
 - Project formation and participation
 - Postdoctoral fellowships
 - Visiting appointments, some jointly with SAMSI
 - Educational activities such as Affiliates Technology Days and SAMSI workshops

Human Resources Vision: Sub-Themes

- Postdoctoral program remains the “centerpiece”
- Increased project opportunities for
 - Senior researchers, especially to propose and lead NISS projects
 - Graduate students
- Extensive activities, centered on but broader than the Affiliates Program, for those other than project participants
- Continuing contact with participants, including
 - NISS Alumni Association

Community Engagement Vision

- NISS becomes part of the infrastructure of the discipline by fulfilling essential, unique roles
- NISS attracts, engages and serves community through a multiplicity of relationships, with
 - Affiliates
 - National professional organizations, including the parent societies of NISS
 - Research institutes in the US and abroad
 - All organizations and individuals supportive of the NISS Strategic Vision

Community Engagement Vision: Sub-Themes

- Multiple communication channels make clear to the community such items as
 - The extent and depth of past and current community engagement in NISS, via research, SAMSI and governance
 - How NISS selects scientific areas and project participants
 - The support of the Board of Trustees, on behalf of the community, for NISS
- NISS balances national engagement with its Research Triangle Park base

Community Engagement Vision: Sub-Themes—2

- NISS is a broad forum for identification of research needs and formation of collaborations to address them, by means of such mechanisms as
 - Spin-offs from NISS projects
 - Affiliates Problem Days
 - Affiliates Proposal Development Fund
 - SAMSI and research institutes
- NISS-sponsored and co-sponsored events are held at sites spanning the geographical and scientific engagement of and with NISS

Community Engagement Vision: Sub-Themes—3

- The Affiliates Programs
 - Deliver clear, agreed-on value to corporate, government, national laboratory and university affiliates over both the short and the long run
 - Shape and support the research programs of NISS
 - Help NISS build bridges to other disciplines
 - Function in a way that does not lead to a feeling of exclusion by non-Affiliates

Scale Vision

- In order to realize the research, human resources and community engagement components of the Strategic Vision, NISS grows to approximately twice its current size, in essentially all dimensions:
 - Scientific leadership
 - Research activity, measured by projects or dollars
 - Project participants, especially postdoctorals and senior researchers from organizations other than NISS
 - Personnel, including a small “permanent” scientific staff
 - Facilities