TABLE 1-1 Key Conditions for Successful IDR at Academic Institutions Based on Committee Interviews with IDR Leaders and Scholars

Aspect	Key Conditions
Initial Stages: Building Bridges	• Common problem(s) to solve • Leadership • Environment that encourages faculty/researcher collaboration • Establishing a team philosophy • Seed/glue money • Seminars to foster bridges between students, postdoctoral scholars, and PIs at the same institution • Workshops to foster bridges between investigators at different institutions • Frequent meetings among team members • Think of the end at the beginning
Supporting the Project	• Science and engineering PhDs trained in research administration • Support project initiation and team building • Seamless and flexible funding • Willingness to take risks • Recognize potential for high impact • Involvement of funding organization
Facilities	• Physical co-location of researchers • Shared instrumentation • Enhance chance meetings between researchers, such as on-site cafeterias
Organization/ Administration	• Matrix organization • Rewards for academic leaders who foster IDR • Tenure/promotion policies for interdisciplinary work • Utilize experts with breadth and IDR experience for assessment • Professional recognition of successful practitioners of IDR

physicist (Crick) a half-century ago enriched their insights with evidence from x-ray crystallography to imagine the structure of DNA, scientists in every research area are alert to flashes of understanding from other fields that may illuminate their own specialties. Without sustained and intense discussion of such possibilities and without special effort by researchers to learn the languages and cultures of participants in different traditions, the potential interdisciplinary research might not be realized and might have no lasting effect. Learning a new field is always hard work, and it must be catalyzed by both formal efforts, such as institutional policies that support