

Collaborative research

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Objectives

- Recognize why collaborative research matters and factors that contribute to effective collaboration
- Identify key challenges in collaborative research

Collaborative Research has become a must!!!!

- Research questions are increasingly complex
- Funding sources supports interdisciplinary efforts and collaboration between industry, community and academia
- Collaboration across distance is now fostered by technology
- Others???

(Columbia University, 2003–2004)

Individual collaboration

- Collaborative research involves two or more persons who act as peers.
- **Individual:** collaboration may mix researchers with differing:
 - Styles
 - Levels of integrity
 - Ability to self-motivate and self-monitor
 - Communication skills
 - Experience in collaboration
 - Expectations of leadership

Types of Individual collaborative research and other types of collaboration

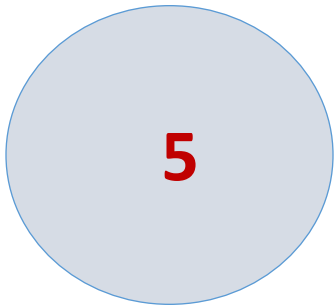
- Individual collaboration
 - Intradisciplinary: within a single field
 - Interdisciplinary: involving multiple fields
 - Industry
 - Communities outreach
- **Research can involve a vast scope of collaborations within departments of institutions, between institutions and internationally.**
- Indeed most policies are aimed at fostering collaboration at these higher levels rather than interindividual collaboration.

Role playing (40 min)

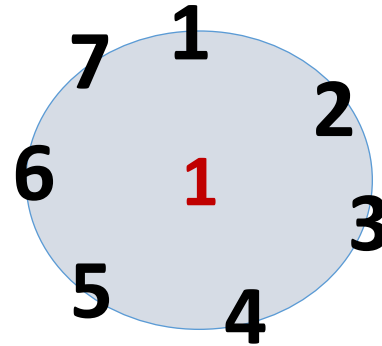
Assign different types of research collaboration and report key elements for success

STEP 1: Assign Intradisciplinary research project and report key elements for success

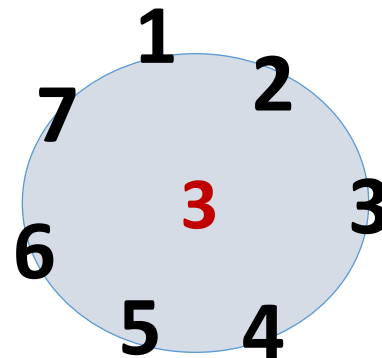
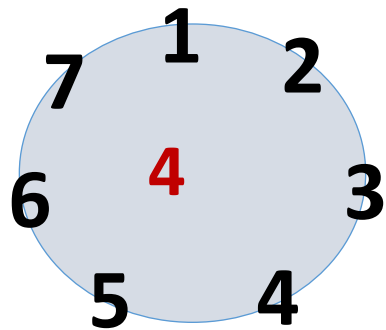
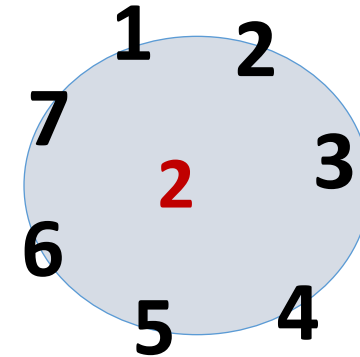
Others



Microbial genomics



Microbial Immunology

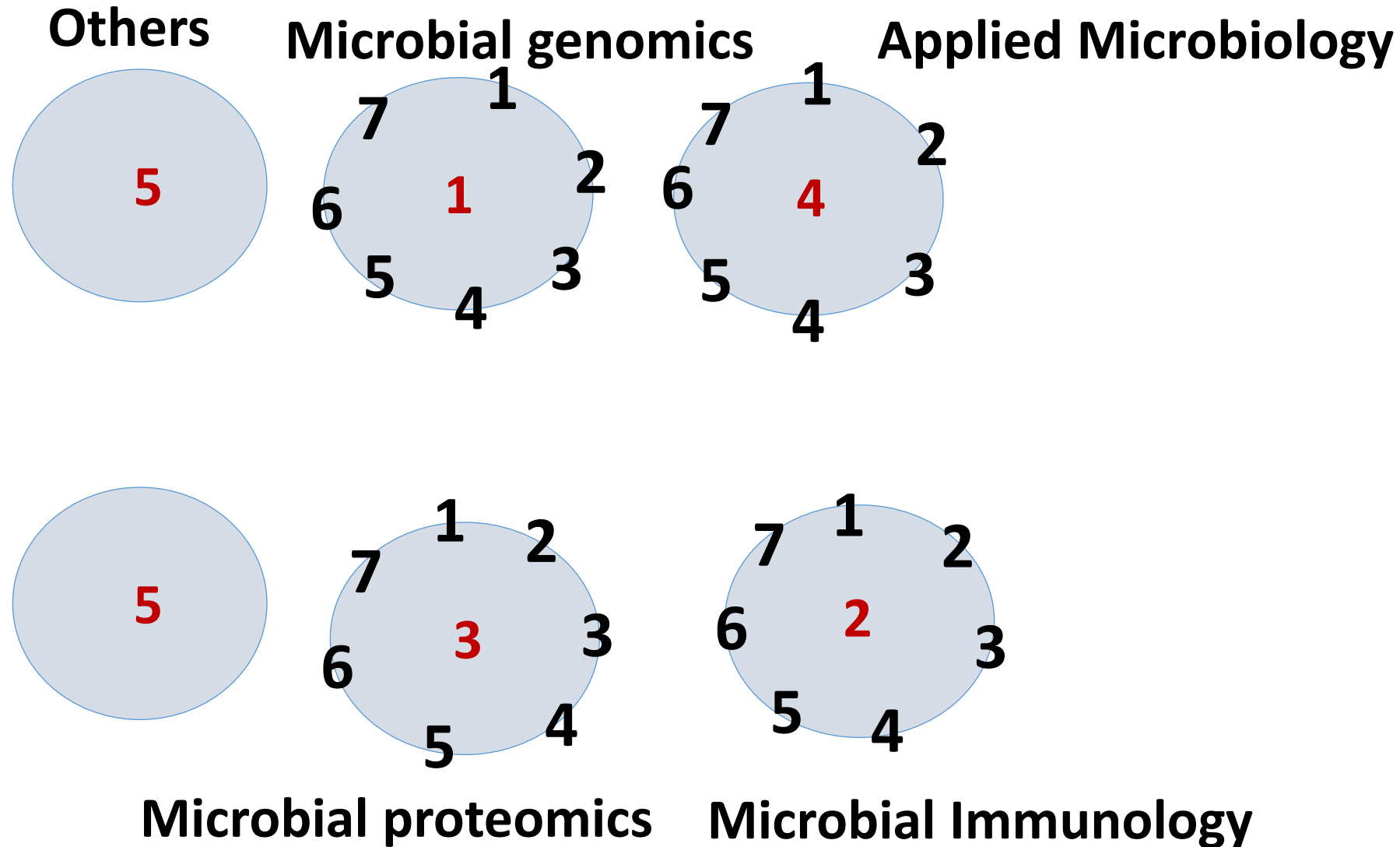


Applied Microbiology

Microbial proteomics

“JIGSAW”

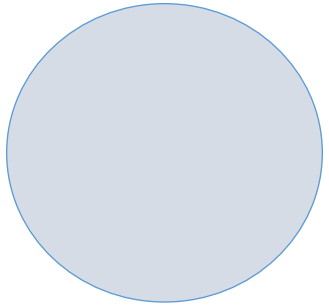
STEP 2: Assign Interdisciplinary research project and report key elements for success



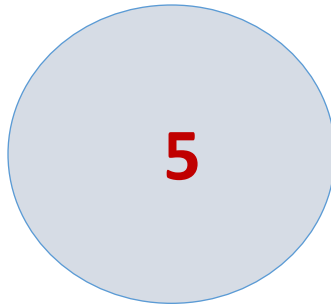
“JIGSAW”

STEP 3: Assign Industry and Community research project and report key elements for success

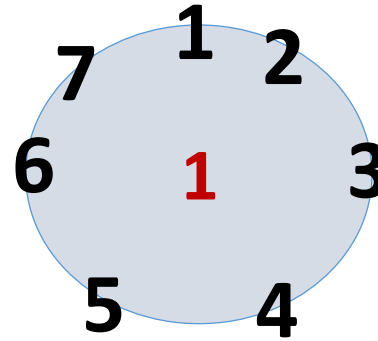
Industry



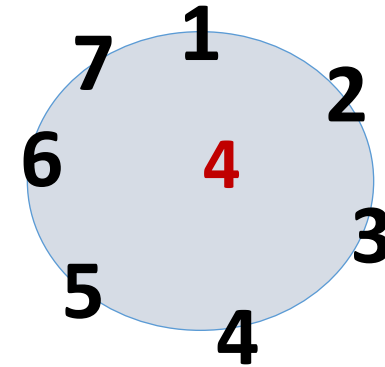
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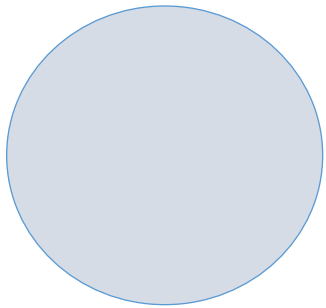
Microbial genomics



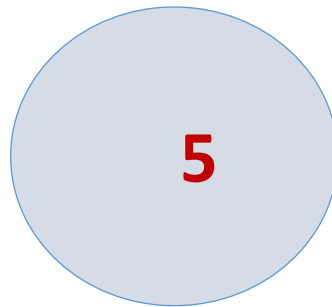
Applied Microbiology



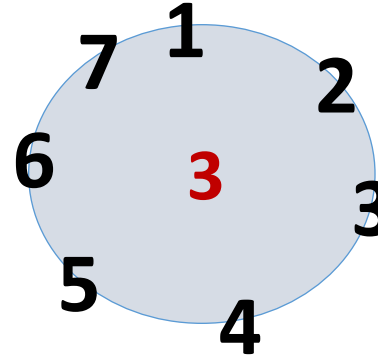
Community



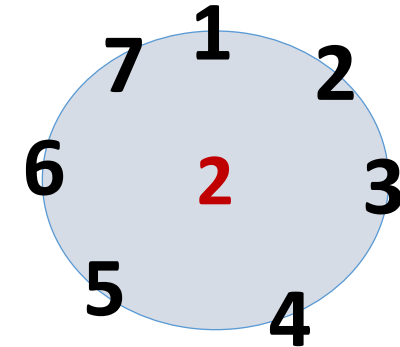
Others



Microbial proteomics



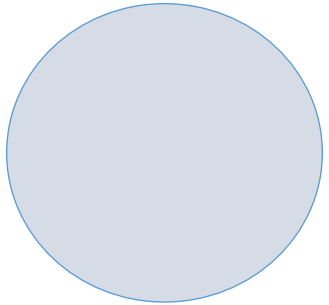
Microbial Immunology



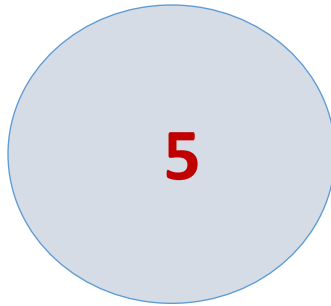
“JIGSAW”

STEP 4: Report key elements of success for collaborations between different Countries and Institutions

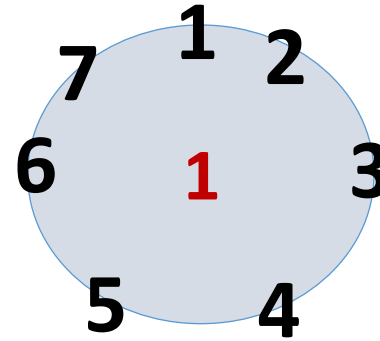
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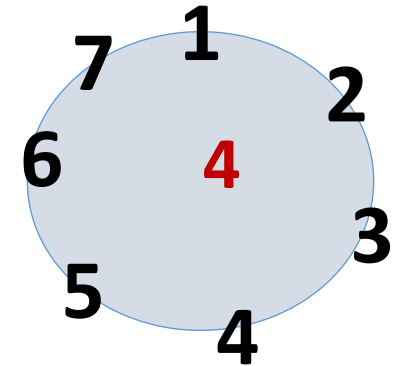
Country B



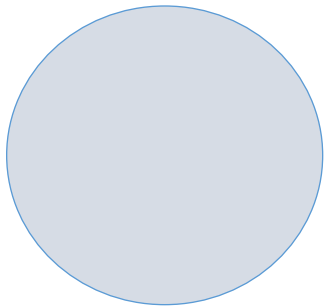
Country C



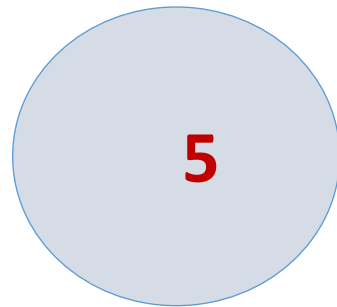
Country D



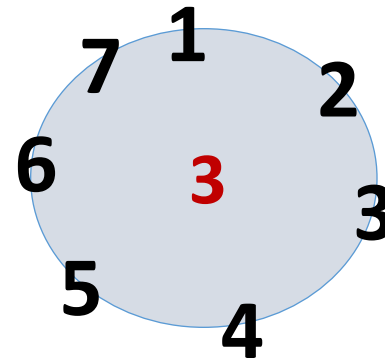
Institution A



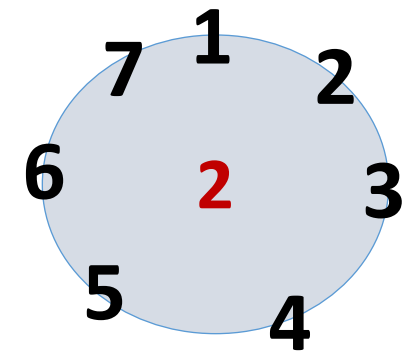
Institution B



Institution C



Institution D



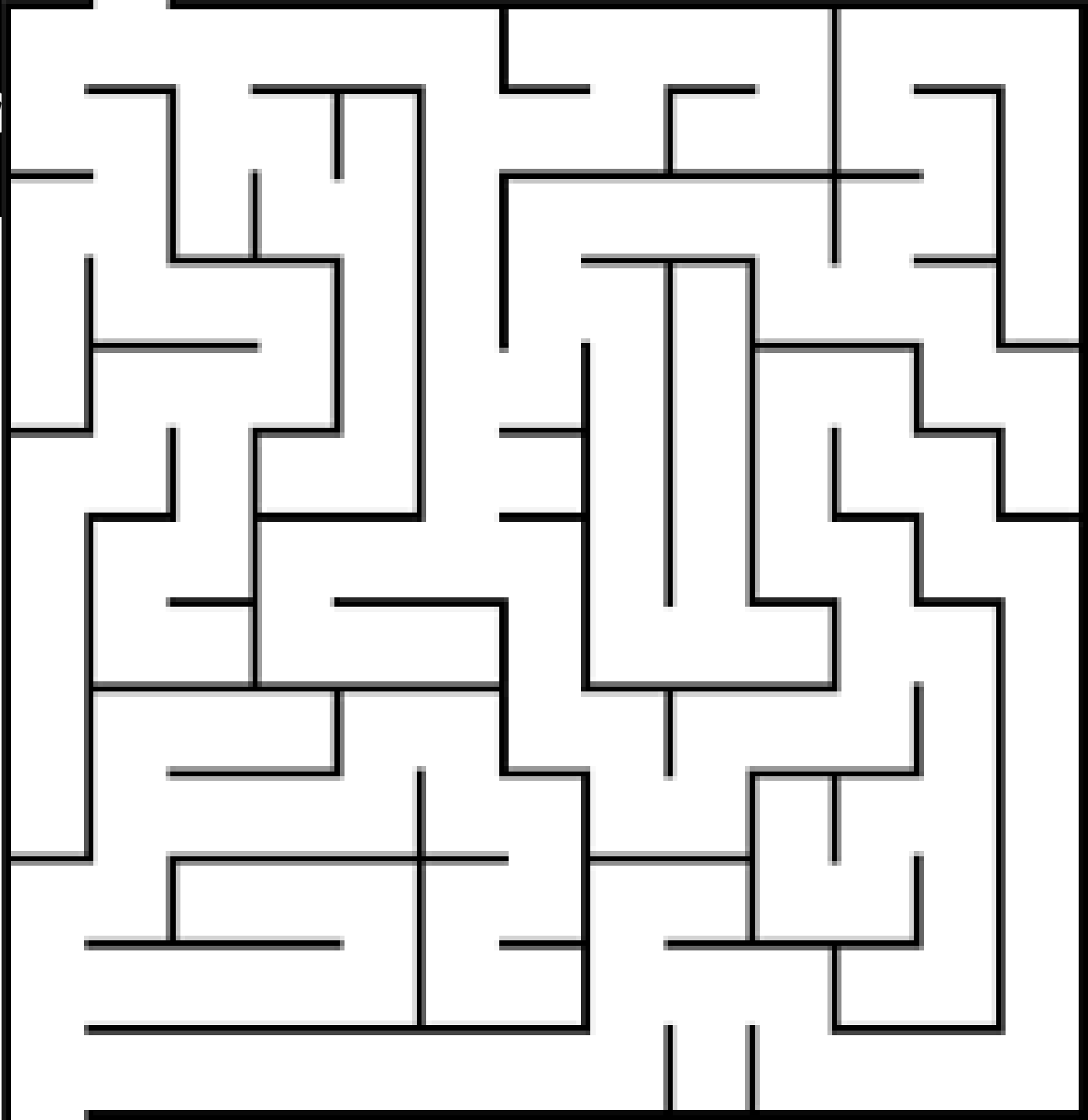
“JIGSAW”

Key elements for building a successful collaboration

- **Communication... Communication... Communication.... Communication**
- Settling baseline goals and objectives
- Sharing and assigning responsibilities, roles and tasks
- Setting up future milestones of the project
- Rules and Norms for sharing and handling data
- Writing and publishing
- Disclosing and settling financial interests
- Establish methods of oversight for each collaborator (timelines, proof of action, quality measures)
- Resolving conflicts

Key Challenges for build

Make your route to success through
challenges!



Key Challenges for building a successful collaboration

Ethical challenges

1. The research plan must receive prior review by an independent ethics review committee.
2. Efforts must be made to minimize the risk to research participants.
3. The research must involve a reasonable risk-benefit ratio.
4. Adequate plans for the care and compensation of participants for injuries directly related to the research must be presented.
5. Individual informed consent must be obtained from all participants.
6. All participants must receive equal consideration and care.
7. There must be an equitable distribution of the burden and the benefits of the research.

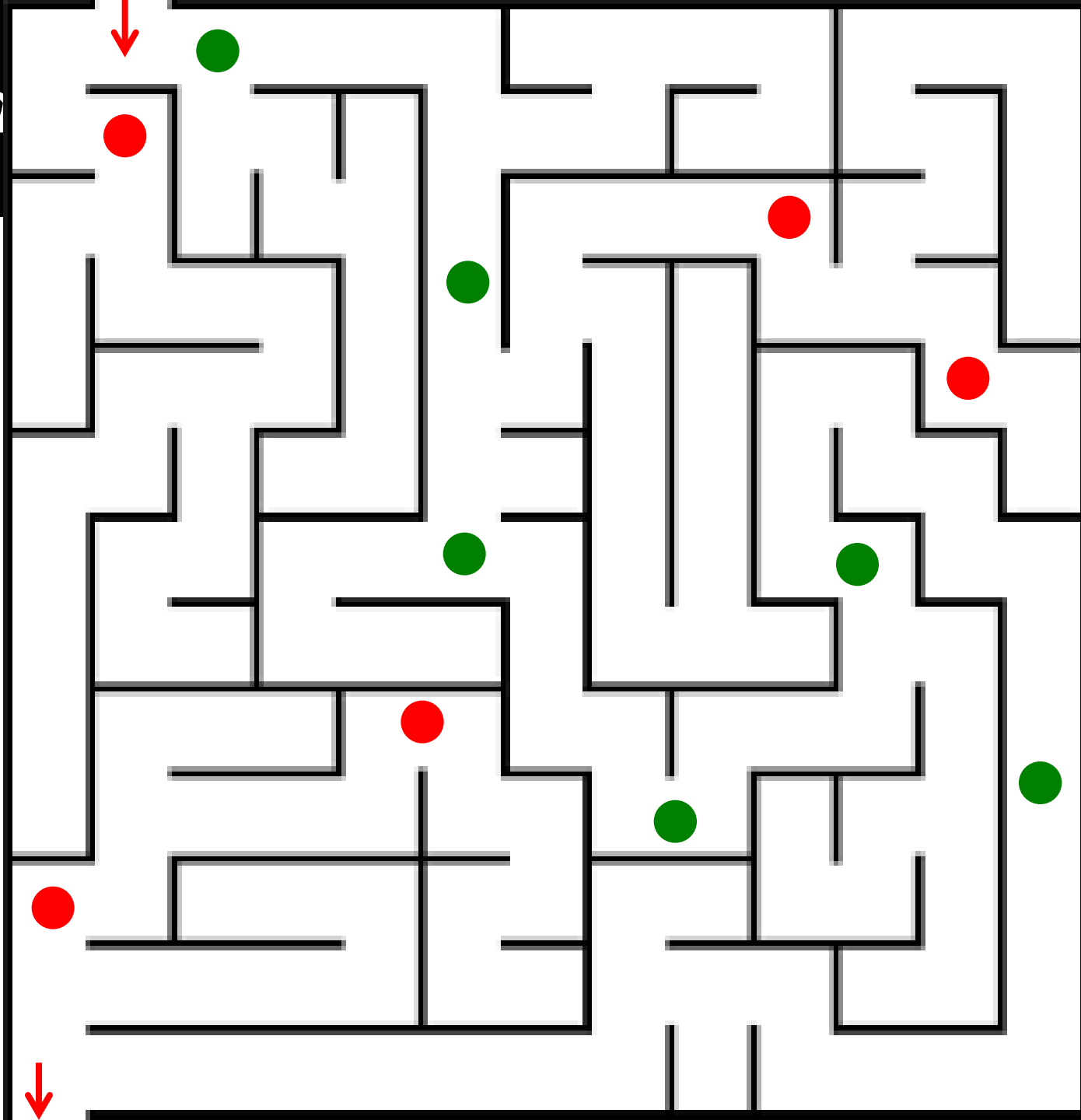
Key Challenges for building a successful collaboration

IPR challenges

1. Data sharing
2. Data ownership
3. Institutional laws

Key Challenges for building

Pass by all points



Key Challenges for building a successful collaboration

Via

MOU

Memorandum of Understanding

Collaborative Research

IT WORKS!