

Potensi dan Peran Ilmuwan Diaspora

WEBINAR RISBANG UI

“Penguatan Kolaborasi Internasional Multidisiplin
menuju Riset dan Inovasi Kelas Dunia”

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Ikatan Ilmuwan Indonesia Internasional (I-4)

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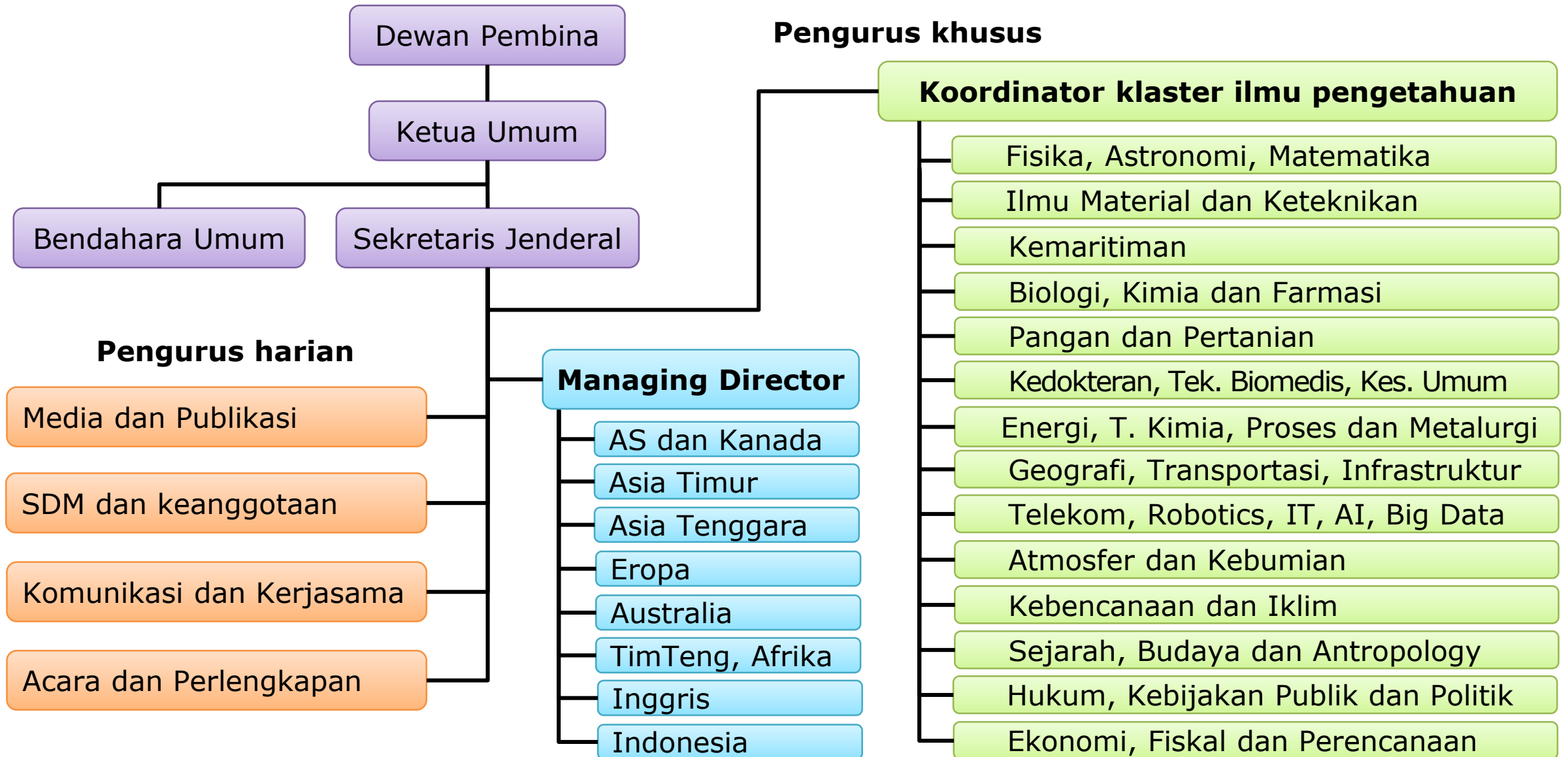
Visi

Wadah bersama untuk menciptakan dan mengoptimalkan **kerjasama yang timbal-balik (mutual) dan selaras (sinergis)** antara ilmuwan diaspora dan ilmuwan dalam negeri

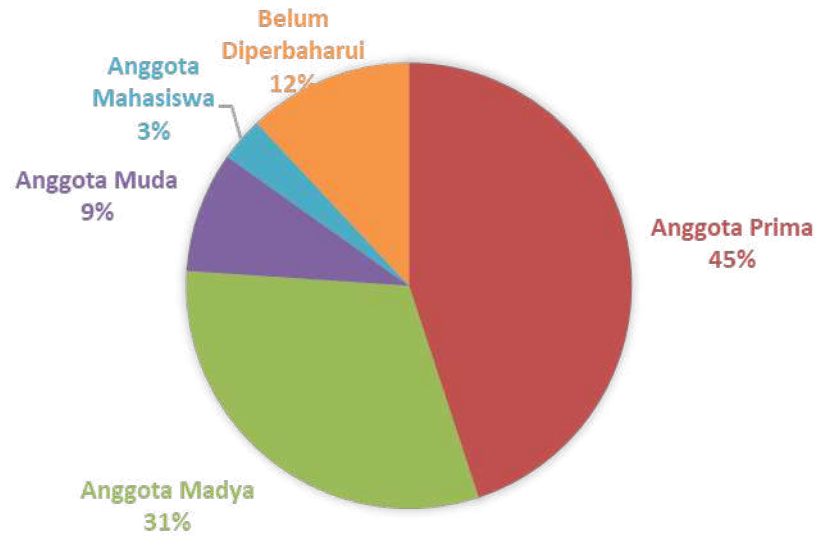
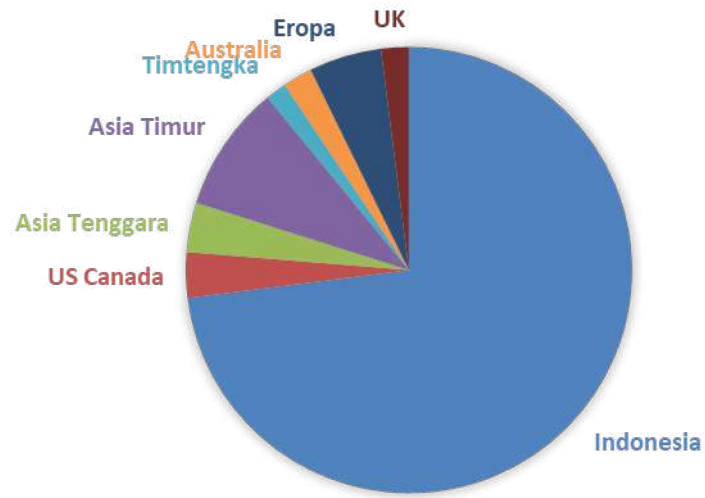
Misi

1. Meningkatkan **aksesibilitas** I-4 oleh ilmuwan dalam negeri sehingga muncul komunikasi dua arah yang aktif antara ilmuwan dalam negeri dan diaspora.
2. Meningkatkan dan memperkuat **sumber daya ilmuwan** dalam negeri dalam penelitian dan pengajaran melalui proses berbagi pengetahuan dan pengalaman (mentoring) yang disesuaikan dengan norma dan nilai di Indonesia
3. Mendorong ilmuwan diaspora untuk **memanfaatkan segala sumber daya** yang dimiliki untuk membantu dan mendukung aktivitas penelitian dan pengajaran di Indonesia
4. Membantu **jejaring sinergi** antara ilmuwan Indonesia dengan **institusi dan industri** baik di dalam dan luar negeri

Struktur Organisasi



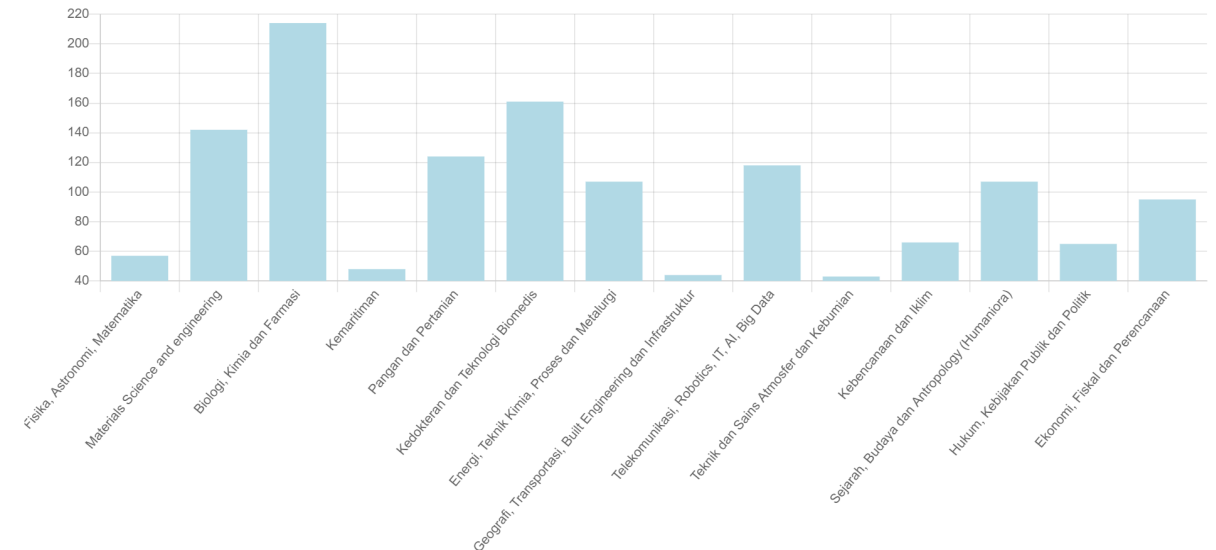
Data Keanggotaan (Sep 2020)



- Jumlah anggota terus bertambah
- Sistem database yang semakin baik
- Sistem pendukung kegiatan

Total anggota I-4	1392
Anggota diaspora	376
Diaspora prima	169

Kawasan	Jumlah
US Canada	46
Asia Tenggara	50
Asia Timur	128
Timtengka	21
Australia	30
Eropa	73
UK	28
Total	376



Anggota per kluster ilmu pengetahuan

Kegiatan I-4 (Contoh)

- I-4 Prime Program: **Joint Collaboration and Publication**
- **Matchmaking Events**
- **Forum Cendekia Kelas Dunia** pada tahun 2020 (Kerjasama dengan ALMI)
- **I-4 Talks** mengundang para diaspora untuk sharing pengalamannya dalam kontribusi bidang keilmuannya dimulai sejak 2014.
- **I-4 Lecture**: (1) live streaming bekerjasama dengan PPI Dunia dan (2) cluster chemistry dan pharmacy live streaming bekerjasama dengan Universitas Bengkulu, Universitas Jambi dan Universitas Lampung) sejak 2013.
- **Workshops**: Scientific Writing, Research Funding, etc.
- **International Summit** pada tahun 2010
- Publikasi Buku: **25 Kisah Ilmuwan Indonesia yang Mendunia** (2015), **Bunga Rampai Kontribusi Ilmuwan Diaspora dalam Pengembangan SD Iptek dan Dikti di Indonesia** (2018).
- Kerjasama dengan Kemenristekdikti dan ALMI dalam kegiatan **World Class Visiting Professor** tahun 2016, **Simposium Cendekia Kelas Dunia (SCKD)** 2017 dan 2018.
- Kerjasama dengan Forum Peneliti Indonesia (ForMIND), UI dan Universitas Osaka untuk **Japan Indonesia International Scientific Conference (JIISC)** 2018 di Osaka, Jepang.



Keanggotaan

Link pendaftaran anggota

<https://member.i4indonesia.org/>







Pendaftaran Anggota

IKATAN ILMUWAN INDONESIA INTERNASIONAL

IKATAN ILMUWAN INDONESIA INTERNASIONAL

- 1 Ketik alamat berikut:**
<https://member.i4indonesia.org/index.php/login>
- 2 Pilih opsi registrasi anggota**
- 3 Isi data yang tertampil, lalu klik Register**
- 4 Pastikan muncul notifikasi ini setelah klik register**
Pendaftaran Berhasil. Silahkan cek Inbox/Spam folder Email Anda untuk mengaktifkan akun.
- 5 Klik tautan aktivasi yang terkirim pada email Anda**
Konfirmasi Register Akun I4 [Inbox](#)
14 Indonesia Human Resource Division <humanresour@i4indonesia.org> to me
Selamat Bergabung di Ikatan Ilmuwan Indonesia Internasional (I4I). Berikut adalah link aktivasi Anda.
Setelah aktivasi dilakukan Anda dapat melakukan login ke Member Information System (MIS) untuk mendapatkan Nomor Anggota.
- 6 kembali ke jendela login dan masuk dengan akun anda**
- 7. Lengkapi profil Anda untuk mendapatkan nomor keanggotaan**
- 8. Setelah mendapat nomor keanggotaan, Anda telah resmi menjadi anggota I-4**

Informasi & Media I4

 media_i4  media_i4  media_i4  Ikatan Ilmuwan Indonesia Internasional

www.i4indonesia.org

Diaspora and Development

- Classic problem between **migration** and **development**
- Knowledge as the **catalyst to advance** the development
- Brain gain perspective
 - How to minimize the negative impacts and encourage its potential benefits
- Diaspora option
 - It is not necessary through permanent return but leveraging the knowledge, skills and other resources of diaspora from abroad
 - Reversing the **brain drain into brain gains (circulation)**
- Diaspora as a **potential** for better mutual and stronger advancement

Problems and Reality

Diaspora

- **Developing** number (quantity) and quality
- Still developing quality, lack of highly-skilled
- **Limited resources and authority**
- Low loyalty and commitment
- **Personal interest**
- **Lack of collaboration and networking** among diaspora



Collaboration

- **Unsustained collaboration** and networking
- **Lack of patience**, loyalty and commitment
- Focus on institution name and other motivations (legal collaboration than the main contents), short term
- Lack of funding, etc.
- **Gap of understanding** and skill
- **Low-self esteem**
- **Favoritism** and closed

Main objectives:

- Creation of collaboration network and stances
- Mutual **capacity building**
- Creation and strengthening each **research identity**
- **Globally renowned** researcher



Initial and start-up stage

Inbound and outbound fellowship
Transit, and dispatch and return program

Advanced stage

Multi years research grant
Joint research in line with national priority

Follow up stage

Capacity building and co-creation
Satellite and collaborative lab

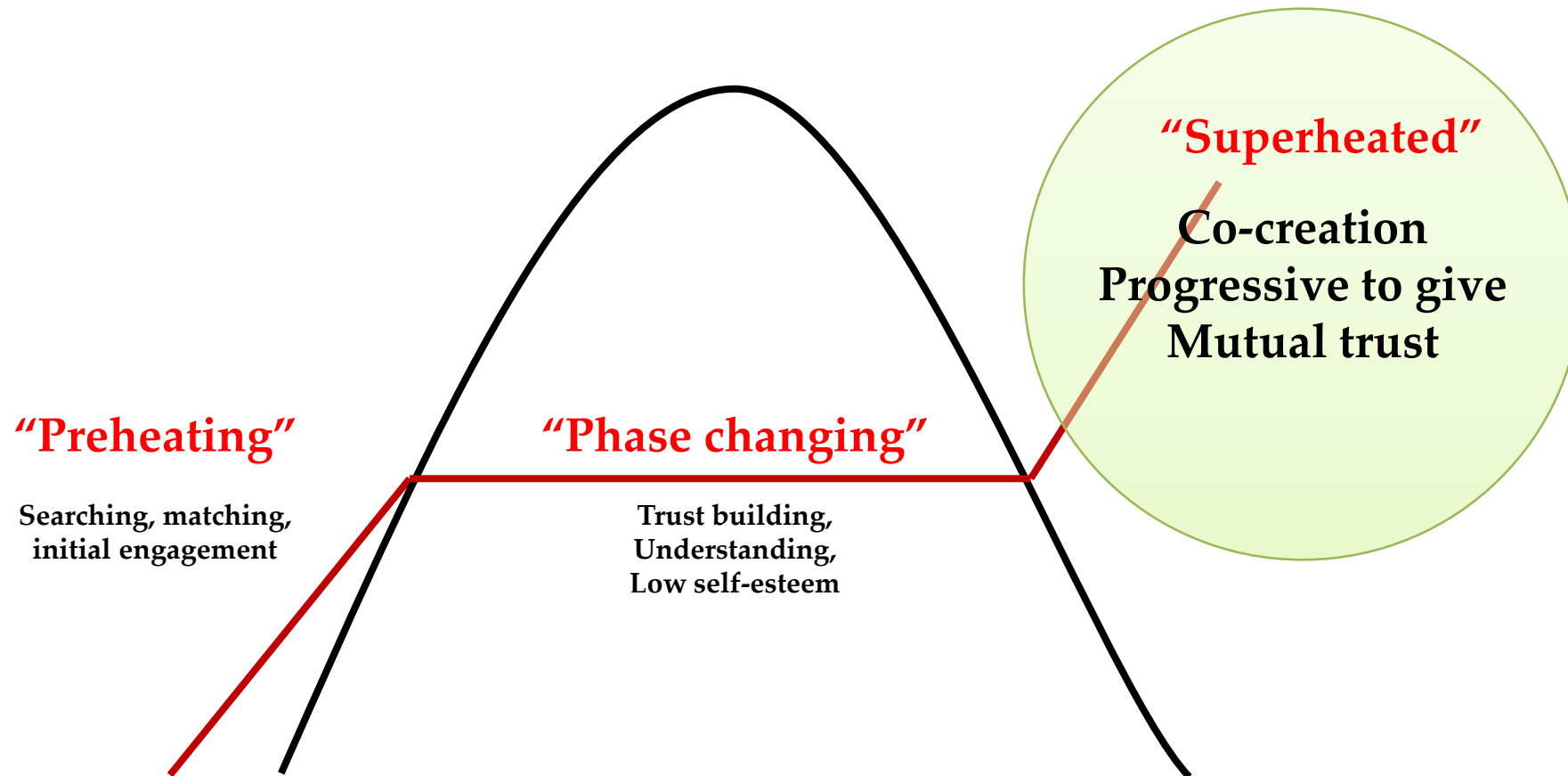
Roles of Diaspora: Characteristics

- Being “**patient**” and “**devote**” for collaboration, training and mentoring toward capacity building
- Building **mutual collaboration**: strong and **reach the grassroots**
- Not being opportunist (no personal interest)
- **Facilitative**: visiting program, access to research facility
- Connecting with other colleagues
- Collaboration and networking among Indonesia scientist
- Collaborate to build and optimize the system
- Supporting **open innovation atmosphere** in Indonesia
- Brushing up the skill for being **frontier**

Expected Activities and Impacts

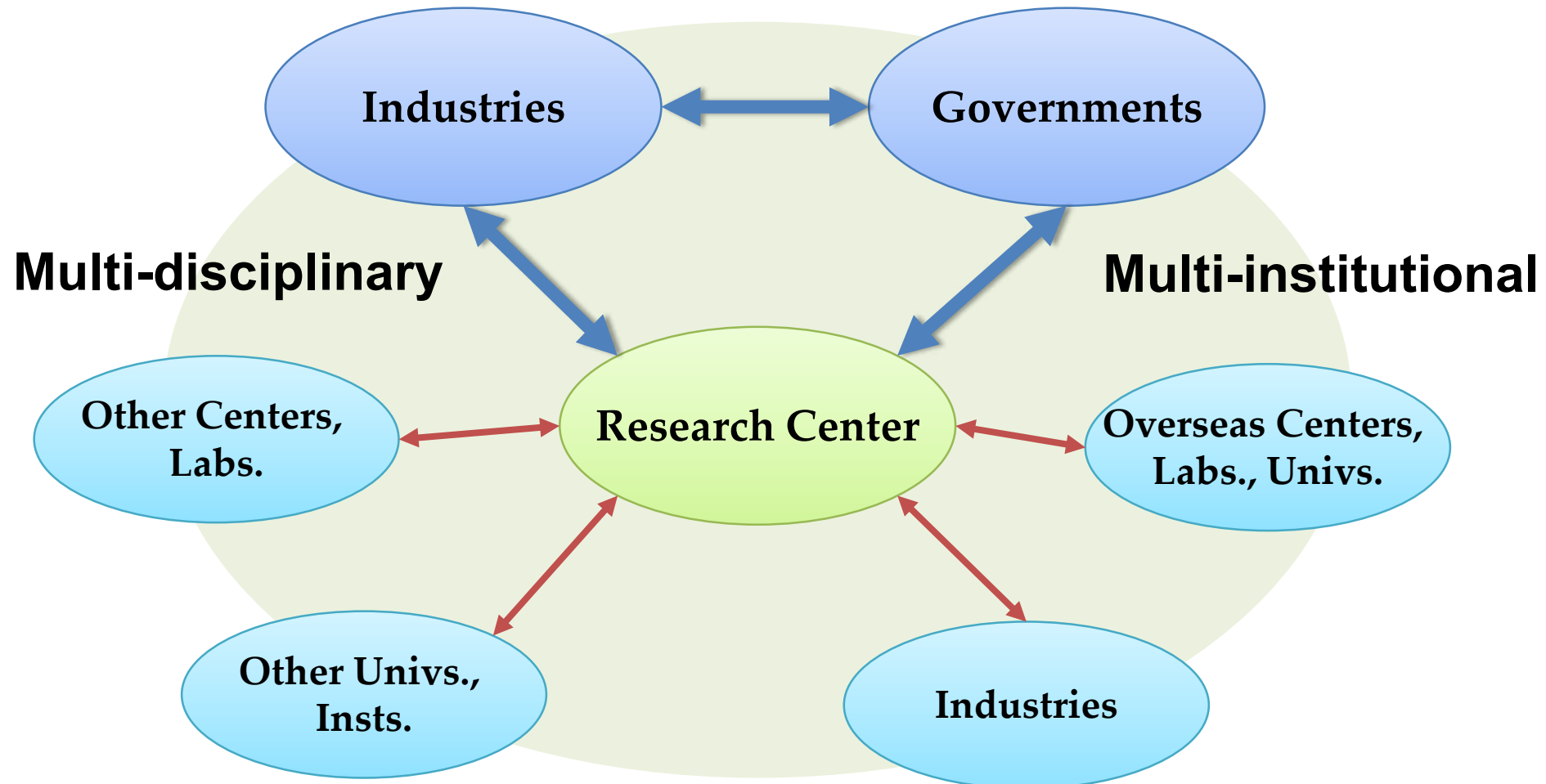
- Greater mobility of scientists, engineers, etc. toward **mutual advancement**
- Promotion of **inter-institution collaborations** and establishment of **shared transnational R&D** infrastructure
- Stimulation of public-private partnerships across national and regional borders
- Adoption of regional intellectual-property-rights-**protection** and **inclusion** frameworks
- Setting up of transnational innovative firms
- Creation of financial **instruments for innovation**
- Improvement of the **climate for regional innovation** activities
- **Harmonization** of technical standards and research regulations

Kolaborasi sebagai Proses

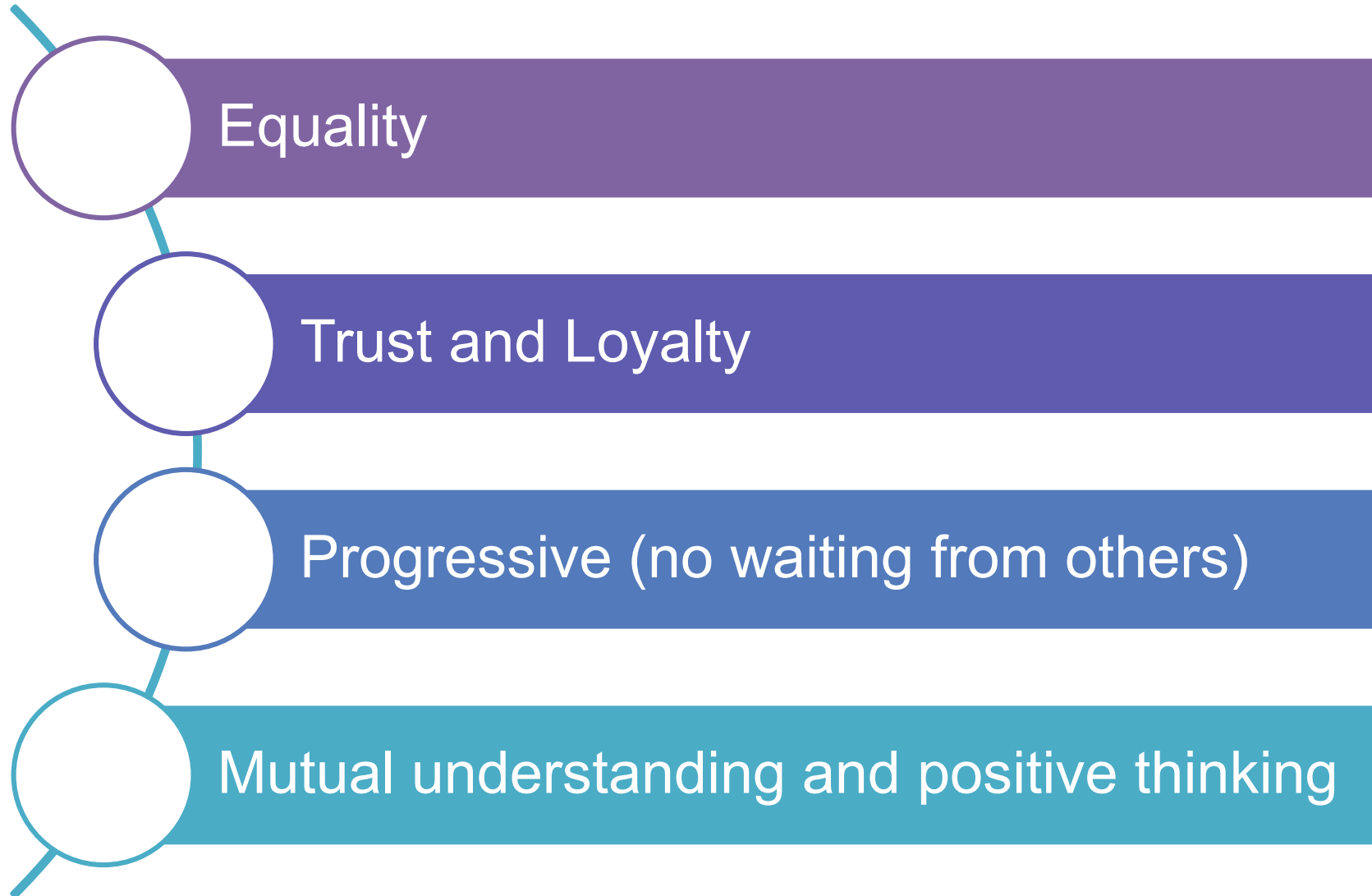


Joint, Collaboration and Co-creation

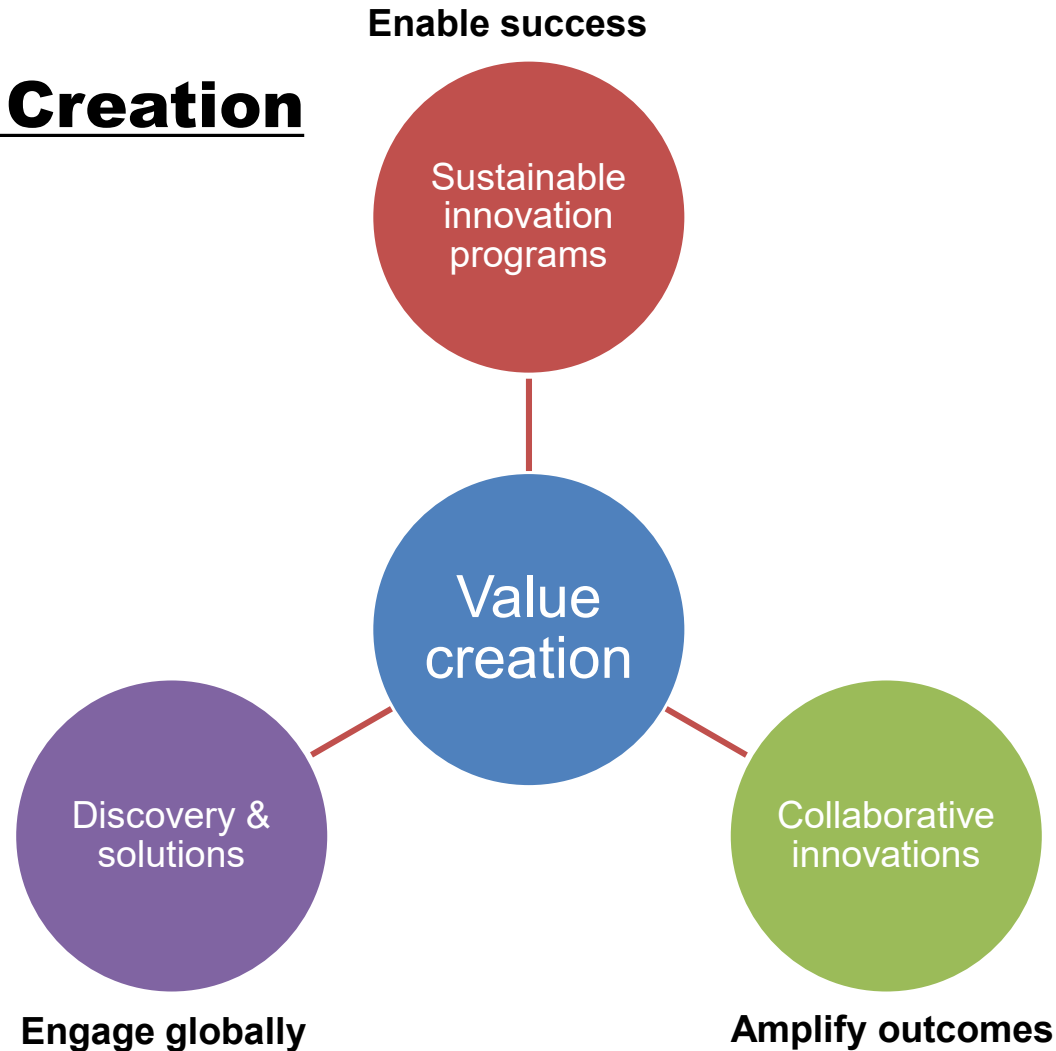
From “**joint (共同)**” to “**collaboration (協働)**”,
from “**collaboration (協働)**” to “**co-creation (共創)**”



Toward Sustainable Collaboration



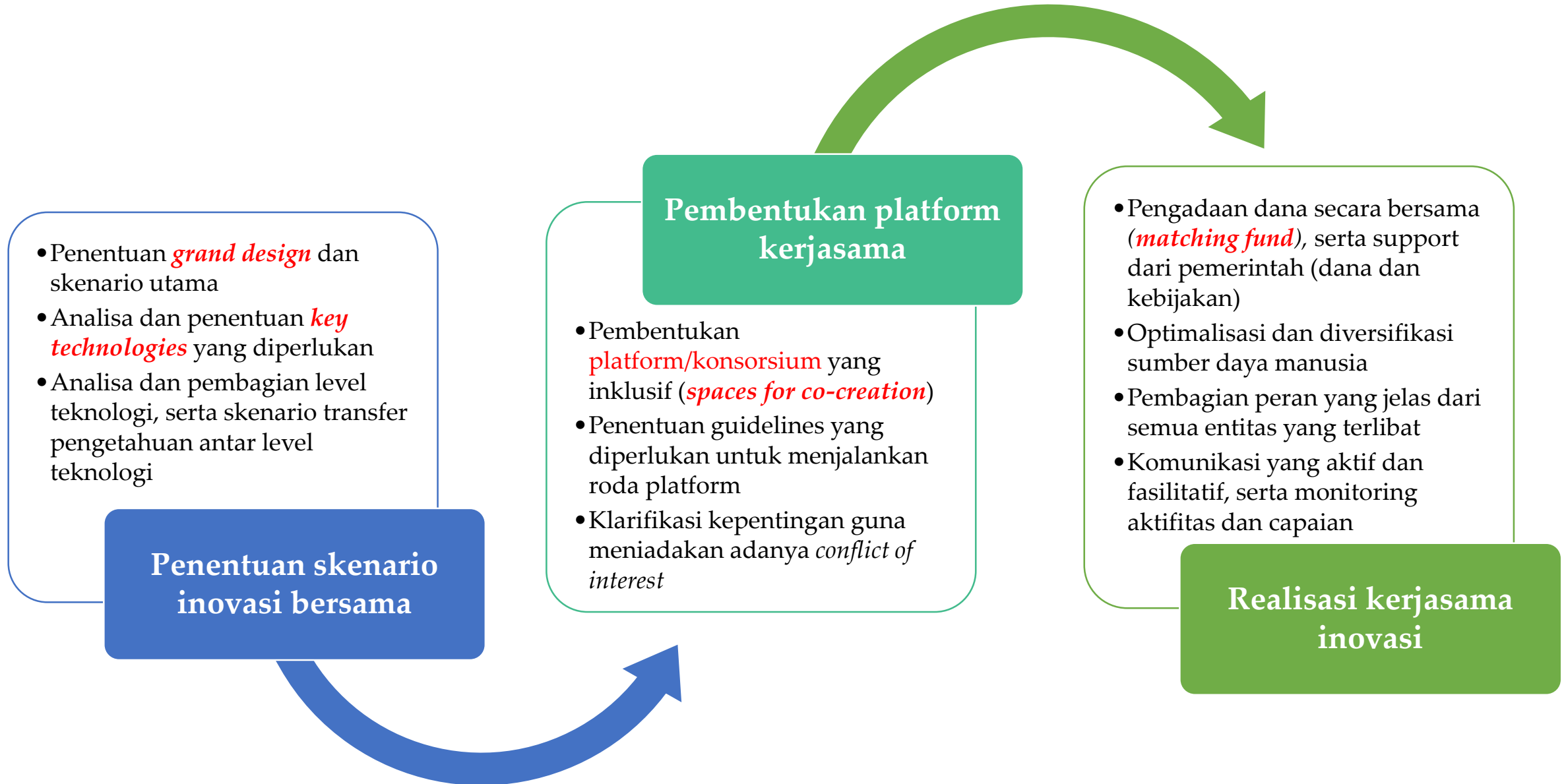
Value Creation



Institution's tasks



Mutual (Open) Innovation



Role of Universities in the Future

Enhancing **Advanced Education and Research** Functions

Core Base for **Collaboration between Academics, Industries, Governments, and Communities**

Function as a **Base for Collaboration and Cooperation among Universities** regarding Policy-based Human Resource Development

Maintaining and Inheriting **Research in a Wide Range of Fundamental and Traditional** Academic Fields

Enhancing **Academic Exchange with Foreign** Universities and Research Institutes as well as Academic Support for Developing Countries

- Strengthen research activity aimed at **creating new knowledge** and **solving global problems**
- Enhancing **graduate schools** in order to cultivate excellent human resources who **inherit value creation**
- To increase university **enrollment rates** and boost human resources who can support the further development of advanced knowledge-based society both nationally and locally.

Maximize Current Function as well as Planning and Preparing for the future

Reforms in Management and Governance System for the Future

- Search for previously **undiscovered candidates**
- To increase adult and international students
- To develop education through **demonstrating features** and **personality** of each university, as well as cooperation and collaboration among them
- To establish **mechanisms for solving problems** with clear and high-value issues **for industry**



Promoting sustainable and **large-scale joint research collaboration** among Univ., Ind., Gov., and Comm.

Strong target to realize Industry 4.0 (or Society 5.0, SDG goals) based on a long-term vision for future society, as well as actively contribute to domestic issues through added value, creating business, and regional revitalization



Cultivate diverse **young/mid-carrier researchers** including women and foreigners through industry- academia-government collaboration and joint research

Improve **mobility of researchers** between universities and corporate organizations through human resource and payroll management reform

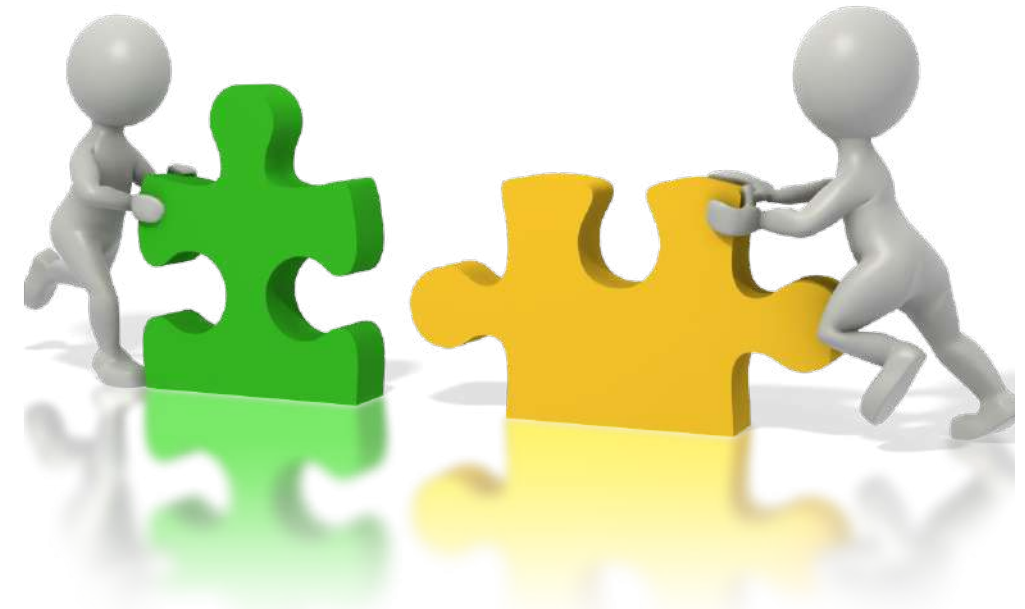


Position industry-academia-government collaboration as a pillar of **university financial management strategy** and **strengthen financial foundations**

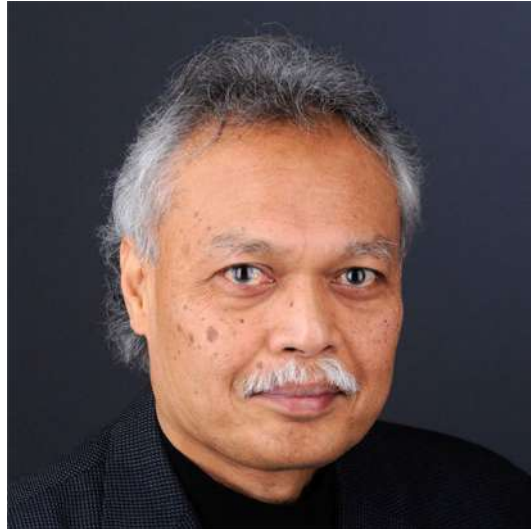
I-4 Prime Program: Collaboration in Research and Publication

- **Anyone with a PhD degree** can submit a maximum one-page extended abstract of the study to a team of organizers. The extended abstract should consist of **research objective, research methodology and research findings**.
- The team of organizers will **select the extended abstracts** (removing the authors' information for double-blind review) to be sent to specific diasporas based on fit.
- The diaspora may:
 - **recommend** another diaspora who fits better,
 - **reject** or
 - **accept** to collaborate.

Upon acceptance, the team of organizers will contact the authors and diaspora. The process should be double-blinded, i.e. neither the authors nor the diasporas know each other until a successful match.



Chief Coordinators



Program Chair
Teruna Siahaan
The University of Kansas,
USA



Program Coordinator 1
Juliana Sutanto
Lancaster University,
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Program Coordinator 2
Satria Z. Bisri
RIKEN, Japan

Program Clusters



Pangan dan Pertanian

Energi, Teknik Kimia, Proses dan Metalurgi



Fisika, Astronomi dan Matematika

Geografi, Transportasi, Built Engineering dan Infrastructure



Telekomunikasi, Robotics, IT, AI, Big Data

Teknik dan sains, Atmosfer dan Kebumihan



Materials Science and Engineering



Kebencanaan dan Iklim

Biologi, Kimia, dan Farmasi



Kemaritiman

Hukum, Kebijakan Publik dan Politik



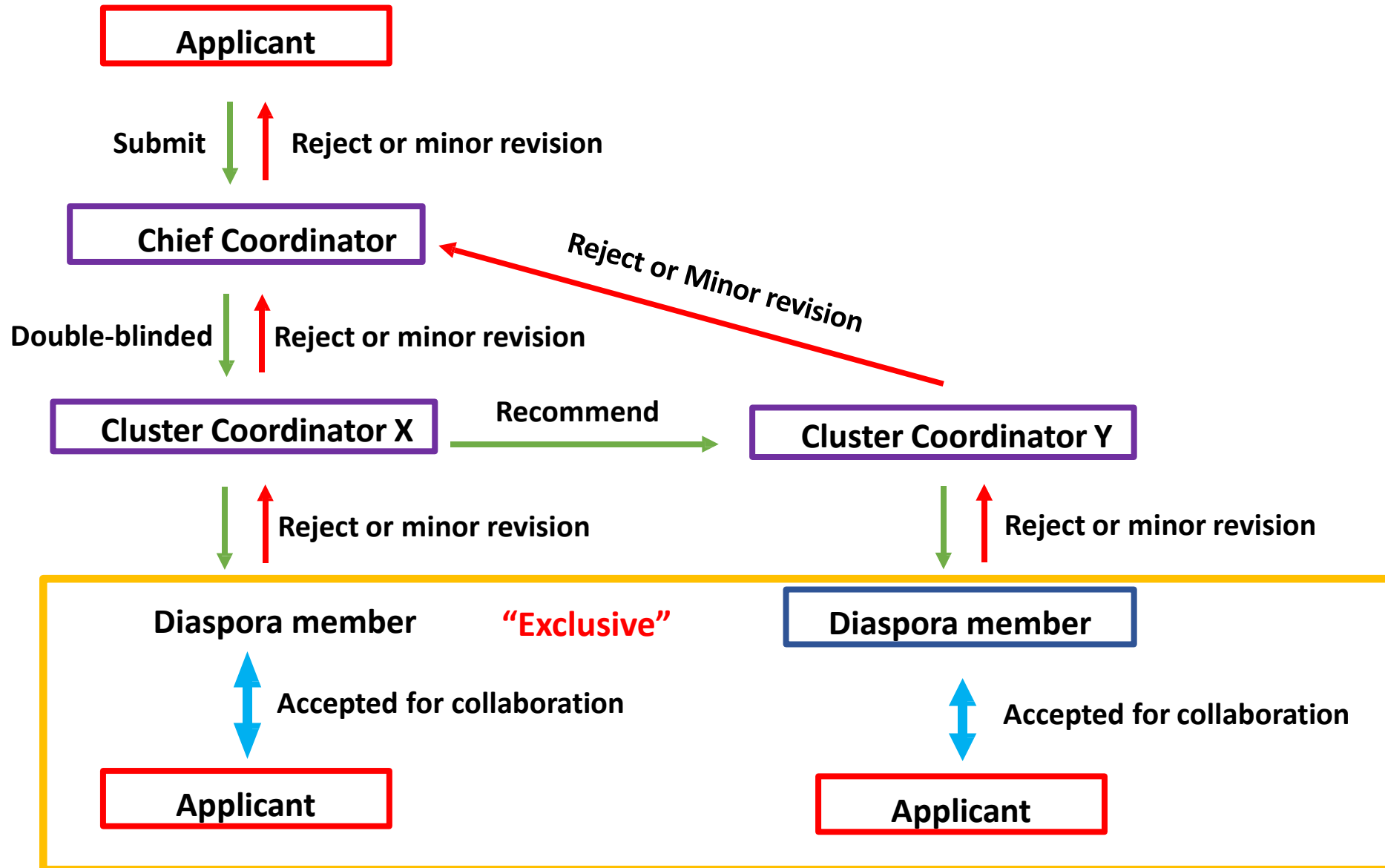
Sosial dan Humaniora (Sosiologi, Antropologi, Sejarah, Budaya dan Religious Studies)

Ekonomi, Fiskal dan Perencanaan



Kedokteran, Teknologi Biomedis, dan Kesehatan Umum

Flow Chart



I-4 Prime Program Provisions

- **Calon potential collaborator ilmuwan diaspora:**

1. Harus bergabung menjadi anggota I-4 1 <https://member.i4indonesia.org/index.php/login/register>
2. Harus mengikuti rewards program 1 <https://i4indonesia.org/keanggotaan/pendaftaran-reward-program/>
3. Minimal lulusan S3
4. Harus berdomisili dan berafiliasi dengan instansi di luar negeri

- **Calon mitra diaspora/applicant:**

1. Harus bergabung menjadi anggota I-4 1 <https://member.i4indonesia.org/index.php/login/register>
2. Harus mengikuti rewards program 1 <https://i4indonesia.org/keanggotaan/pendaftaran-reward-program/>
3. Applicant/Corresponding Author minimal lulusan S3
4. Harus berdomisili dan berafiliasi dengan instansi di dalam negeri

Submission

- Login to member account
- Write in English
- Contents:
 - ✓ Cluster
 - ✓ Title
 - ✓ Objective
 - ✓ Methodology
 - ✓ Findings

I4 Indonesia

Sign out

Pilih Satu Tujuan Klaster yang Menerima Artikel Saat Ini :

Sejarah, Budaya dan Antropology (Humaniora)

Title

Objective (Maximum 150 Characters)

Methodology (Maximum 200 Characters)

Findings (Maximum 200 Characters)

Submit

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