



UIDP Tokyo Forum

"Long-Term University-Industry Relationships" in Takeda

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Better Health, Brighter Future

Takeda Corporate Philosophy

Purpose Better health for people, brighter future for the world.

Vision Discover and deliver life-transforming treatments, guided by our commitment to patients, our people and the planet.

Values: Takeda-ism We are guided by our values of Takeda-ism which incorporate **Integrity, Fairness, Honesty and Perseverance**, with Integrity at the core. They are brought to life through actions based on **Patient-Trust-Reputation-Business**, in that order.

Imperatives

PATIENT

- Responsibly translate science into highly innovative, life-changing medicines and vaccines
- Accelerate access to improve lives worldwide

PEOPLE

- Create an exceptional people experience

PLANET

- Protect our planet

UNLEASH THE POWER OF DATA AND DIGITAL

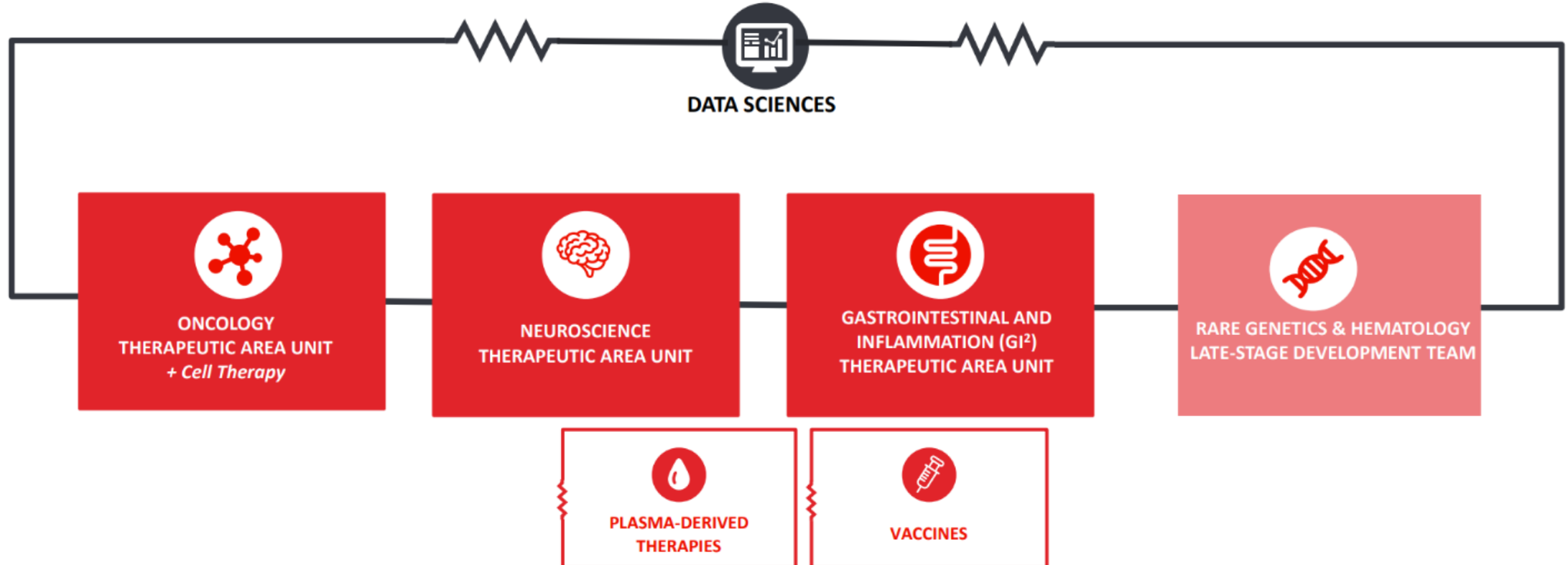
- We strive to transform Takeda into the most trusted, data-driven, outcomes-based biopharmaceutical company



We remain patient-driven and science first

R&D STRATEGY

INNOVATIVE BIOPHARMA



PARTNERSHIP

Partnership is a central element of Takeda's R&D strategy

We seek innovation and partner to nurture it, wherever it resides.

Partnership is a central element of our R&D strategy. We work with partners to create complementary collaborations where our global reach, scientific expertise and clinical excellence can help them bring their scientific innovation and vision to patients.



200+

Active collaborations
Takeda has in place globally



~100

Public-Private partnerships
engaged in through R&D across
76 countries



>60%

Of our pipeline is partnered
allowing us to tap cutting-edge
science and innovation at the source

Various academic partnership model* in Takeda R&D

	Model	Description	Advantage	Disadvantage	Examples
1	Traditional pharma–academic partnership: one company–one investigator	A pharmaceutical company forms a collaboration with an academic investigator by providing funding or other resources in exchange for the investigator's knowledge and contribution to research	Simple relationship; quick start; focused	Ad-hoc and piecemeal manner; communication with other investigators can be limited; limited opportunity to synergize with other investigators	Numerous; TMDU (Prf. Yokota), ETH, QST, etc.
2	Academic centers of excellence	A pharmaceutical company builds master agreements with one or more universities; in some cases, scientists from pharmaceutical laboratories are co-localized to the academic institutions to facilitate collaboration	Master agreements that streamline the new collaboration initiation process; potential synergy among multiple investigators within the institution; co-localization of experienced drug discovery scientists making the collaboration more aligned with drug discovery needs	Typically limited to premier institutions; alignment of pharmaceutical scientists in the centers of excellence with internal research units may be challenging; academic investigators sometimes naïve in dealing with the complexities of drug discovery and development; vulnerable to market forces such as strategic changes within and mergers and acquisitions among pharma companies	T-CiRA, AIM, Tri-I-TDI, SPRInT, Sanford Consortium, etc.
3	Open crowdsourcing	A pharmaceutical company creates a contest to encourage external scientists to submit proposals or ideas. Awards are given in the form of grants or access to drug discovery expertise, tools and reagents with potential for longer-term follow-up collaborations	Unbiased and broad outreach; scale and diversity of solutions in early discovery; potential to lead to unexpected findings; low-cost structure	The problem statements presented in crowdsourcing tend to be less proprietary to avoid revealing company-specific details, which could limit the repertoire of opportunity requests	COCKPI-T

“Academic center of excellence” model* in Takeda R&D

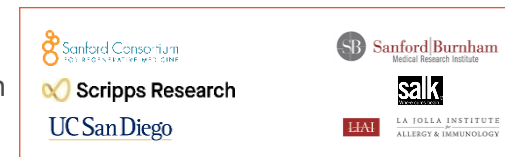
Not comprehensive

- Wide alliance network
- Many ongoing projects across Takeda’s therapeutic areas
- Active engagement with tech transfer and researchers to scout and source innovation

T-CiRA



Sanford Consortium



Tri-I TDI & Bridge Medicines



Seattle SPRInT



Stanford AIM

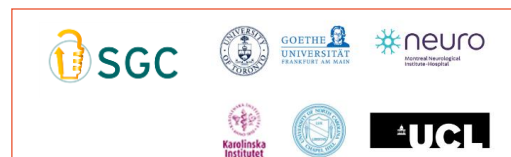


Columbia-NYU



etc.

SGC



9 Alliances
20 Institutes
50+ Projects

*Reference: Racing to define pharmaceutical R&S external innovation models, Liangsu Wang, **Andrew Plump** and Michael Ringel, *Drug Discovery Today*, 20 (3), 361-370, 2015

Neuroscience academic partnership history

Not comprehensive

Calendar Year

2016

2017

2018

2019

2020

2021

2022

2023

Disease Oriented



Platform / Others



Maximizing the value creation with partnership with academic institution in Takeda R&D

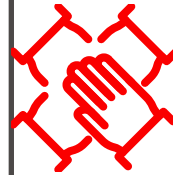


Research Institution

- World-class, cutting-edge discovery biology
- Deep investigator community
- Broad expertise across therapeutic areas
- Patient focused, patient experience
- Entrepreneurial spirit



- Patient-centric approach
- Deep therapeutic areas expertise
- World-class research/transrational capability
- Clinical development & operational expertise
- Commercialization strategy



Joint effort collaboration to make synergy by each strength complementary



Design and translate early research to therapeutics

Thank you!

