University-Based New Industry Creation Fund Project Startup Ecosystem Co-Creation Program



Tech Startup HOKURIKU (TeSH) Overview

October 7, 2024 UCHIDA Fumihiko Program Head of Directors, Tech Startup HOKURIKU/ Director, Startup Promotion Office, Headquarters for Promotion of Future Innovation, JAIST

Background



The industry-government-academia collaboration system in the three Hokuriku prefectures was recognized and selected for the national "University-Based New Industry Creation Fund Project".

- Nov. 2022 Government "Startup Development Five-year Plan"
 - Increase investment 10x by FY2027

New Industry Creation Fund for University Startups Supplementary budget (2023-2027) (98.8 billion yen)

[Program 3] Mr. KUBOTA Kiichi Governing board's chairperson / President, KSP Inc.

- 1) D-Global
- 2) Startup Ecosystem Co-creation program (Aug. 2, 2023 Open call)

Base-city Platform Co-creation Support

Regional Platform Co-Creation Support

Tesh Tech Startup HOKURIKU(TeSH)

From Feb. 1, 2024

- Selection reasons
- Collaboration in Hokuriku
- Application addresses startup creation challenges

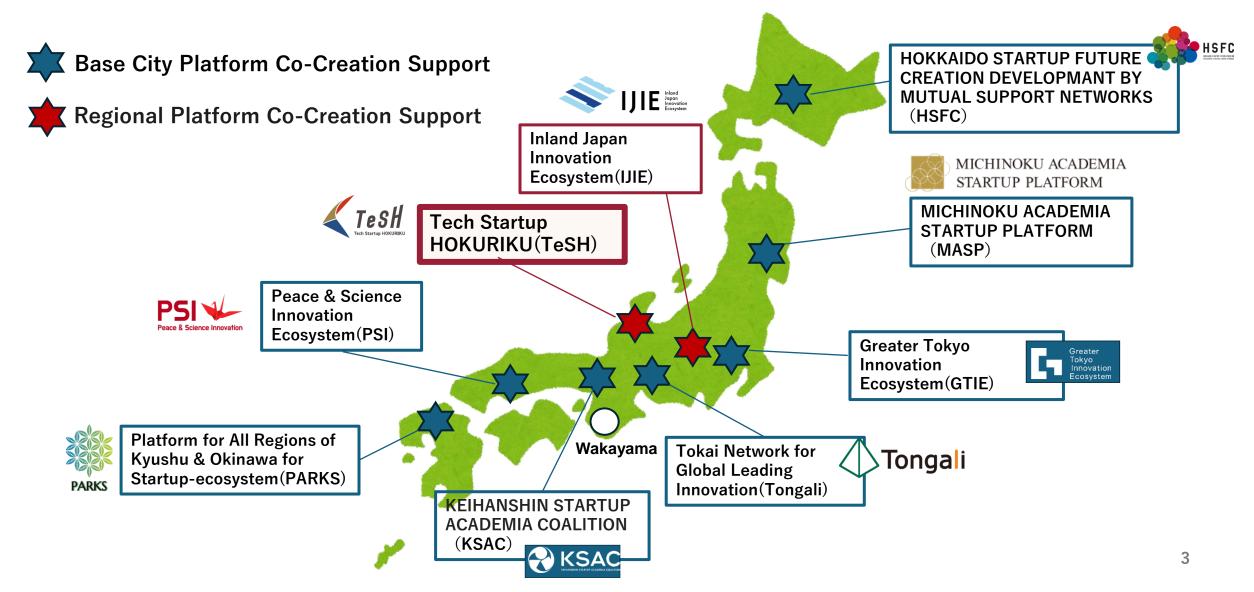
Startup Ecosystem Base City (Cabinet Office) Startup Ecosystem Formation Support selected PF in 2021 (JST) Startup Ecosystem Formation Support selected PF in 2022 (JST)

·Allocation (Direct + Indirect expenses(30%)) 3.4150 billion yen (2023-2027)

Supplementary budget New Industry Creation Fund for University Startups (98.8 billion yen) (2023-2027)



Startup Ecosystem Co-Creation Program 9 Platforms



Dramatically improve the quality and quantity of startups from universities and technical colleges in the Hokuriku





Materials / Precision equipment / Plant / Manufacturing, AI / IT, Pharmaceutical / Medical device industries, Chemistry / Traditional crafts, etc.

Strong Research Capabilities

Molecular Biology/Genetics

(Kanazawa Univ. 10th)

Neuroscience (Kanazawa Univ. 5th)

Pharmacy(Univ. of Toyama 9th)

♦ Technology

Engineering (Toyama Univ. 7th)

Materials Science (JAIST 8th)

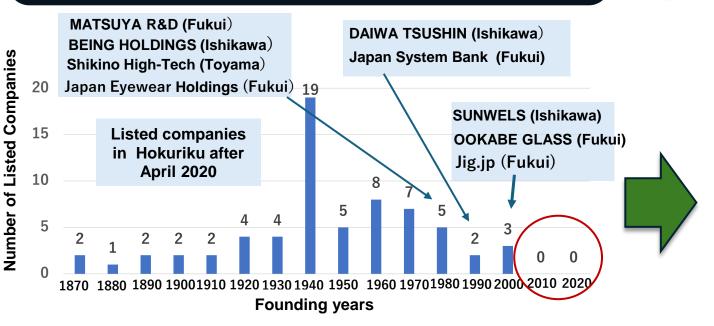
Computer Science (Kanazawa Univ. 7th)

Chemistry (JAIST 3rd)

♦ Agriculture (Kanazawa Univ. 3rd)



Few Listed Startup Companies



Founding years of 70 companies with headquarters in Hokuriku and Listed companies after 2020



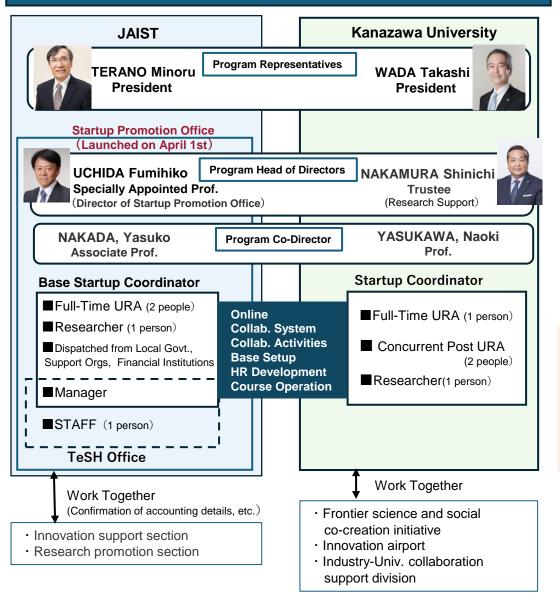
Academia Steering Toward Startup Development

Enhance Quality & Quantity of University & Technical College-Launched Startups in Hokuriku

Implementation Structure



Host Organizations



Joint Organization for Creating Startups

Univ. of Toyama Toyama Prefectural Univ. Toyama College

Ishikawa Prefectural Univ. Komatsu Univ. Kanazawa Institute of Tech Kanazawa Medical Univ. Hokuriku Univ. Ishikawa College

Univ. of Fukui Fukui Prefectural Univ. Fukui Univ. of Tech Fukui College

12 Universities & 3 Technical Colleges

- **4 National Universities**
- **4 Public Universities**
- **4 Private Universities**
- **3 Technical Colleges**

Platform Steering Committee

Chairperson: JAIST, Kanazawa Univ.

● Host Organization: Program Representatives,

Program Head of Directors,

Program Co-Director

● Joint Organization: General manager,

Program Co-Director

● Startup Promotion Office: TeSH Office

SU Creation Program Selection Committee

Seeds Discovery Subcommittee

Environment Improvement Subcommittee

Intellectual Property Strategy
Subcommittee

JAIST: GAP Fund

Kanazawa Univ.: Environment & Patents

Team TeSH (As of September 20, 2024)



Academia

12 Universities & 3 Tech Colleges

Host Organizations

JAIST Kanazawa Univ.

Joint Organization for Creating Startups

Univ. of Toyama Toyama Prefectural Univ. Toyama College

Ishikawa Prefectural Univ. Komatsu Univ. Kanazawa Institute of Tech Kanazawa Medical Univ. Hokuriku Univ. Ishikawa College

Univ. of Fukui Fukui Prefectural Univ. Fukui University of Tech Fukui College

Cooperative Organizations

33 Organizations

Prefecture, Municipality, etc.

Toyama Prefectural Govt.
Ishikawa Prefectural Govt.
Fukui Prefectural Govt.
Toyama New Industry Organization
ISICO

Fukui Industrial Support Center

Economic Organization

Hokuriku Economic Federation SME SUPPORT JAPAN Chubu Bureau of Economy, Trade and Industry Chubu Bureau of Economy, Trade and Industry-Electricity and Gas Business Hokuriku Branch Hokuriku Industrial Advancement Center

Private Company

NIHONKAI Lab.
K D D I
Asian Bridge
HOKURYO DENKO
BEING HOLDINGS
I-O DATA
ACTREE
HOKUDEN Business Investment

Finance

HOKURIKU BANK
BANK of Toyama
First Bank of Toyama
DBJ Hokuriku Branch
Fukui Bank
Sumitomo Mitsui Trust Bank
SMBC
SMBC Venture Capital
JP Bank

Other

JETRO Kanazawa JETRO Toyama JETRO Fukui Mitsubishi Research Institute Commercialization Promotion
Organizations
22 Organizations

VC, Kanazawa University

Vision Incubate

VC,CVC, Hokuriku

Hokuhoku Financial Group Fukui C&C QR INVESTMENT Carbon Ventures

VC. Outside of Hokuriku

KSP

HED

INCUBATE FUND
Beyond Next Ventures
JAFCO
ANRI

U TOKYO IPC

SAMURAI INCUBATE Fast Track Initiative

QB Capital

Bio-Sight Capital

DEFTA Capital

MIRAISOZO INVESTMENTS

Mitsubishi UFJ Capital

HACK VENTURES

Private Accelerators

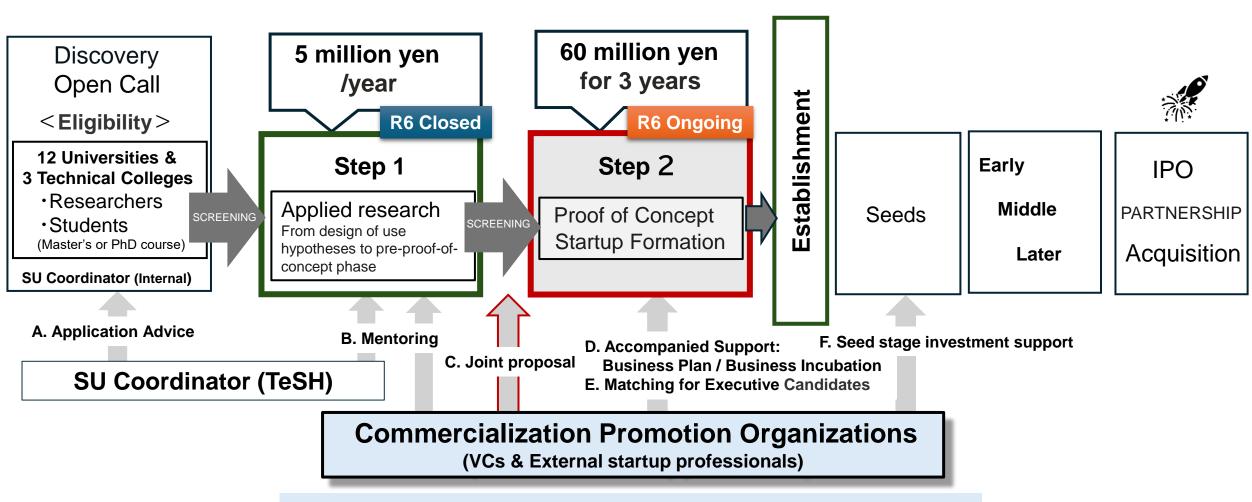
RICH

Sojitz Institute of Innovative Technologies

TeSH GAP FUND



(1) Gap Fund Support



(2) Human Support for Business Development

Portfolio & Basic Structure of the TeSH Gap Fund

Portfolio

Basic Structure

Field	%	Details	Step		Eligibility	Subsidy amount	Adoption	Period
A. Medical	50%	Medical care, Drug discovery,	1	KAGAYAKI	Researchers	5 million yen	15 to 20	
B. Technology	30%	Nursing care, Welfare, etc. Mobility, Green tech, IT technology (including Al		KAGAYAKI Young	Students (Master's or PhD course)	(Indirect expenses: 1.5 million yen)	5	1 year
C. Environment	10%	applications), etc. Environment, Food, Biotechnology, etc.	2	KAGAYAKI Plus	Researchers	60 million yen (Indirect expenses: 18 million yen)		
D. Region, Other	10%	Regional (Tourism, Transportation, etc.), Arts, Education, Social sciences, etc.		KAGAYAKI Plus Young	Students (Master's or PhD course)	*Total limit with KAGAYAKI Young 5 million yen (Indirect expenses: 1.5 million yen)	A Few	About 3 Years

KPI of Startup Creation Program

Based on probability of Grants-in-Aid for Scientific Research, patents, startups, etc.

Designed on scale of 15-20 adopted cases: Reference to base-city platform results in 2022

OGrants-in Aid: Equivalent to Hokkaido, Hiroshima ONumber of Sole patent application:

ONumber of startups:1.1% of the nation

Number of Adoptions of 7 Base Platforms in 2022

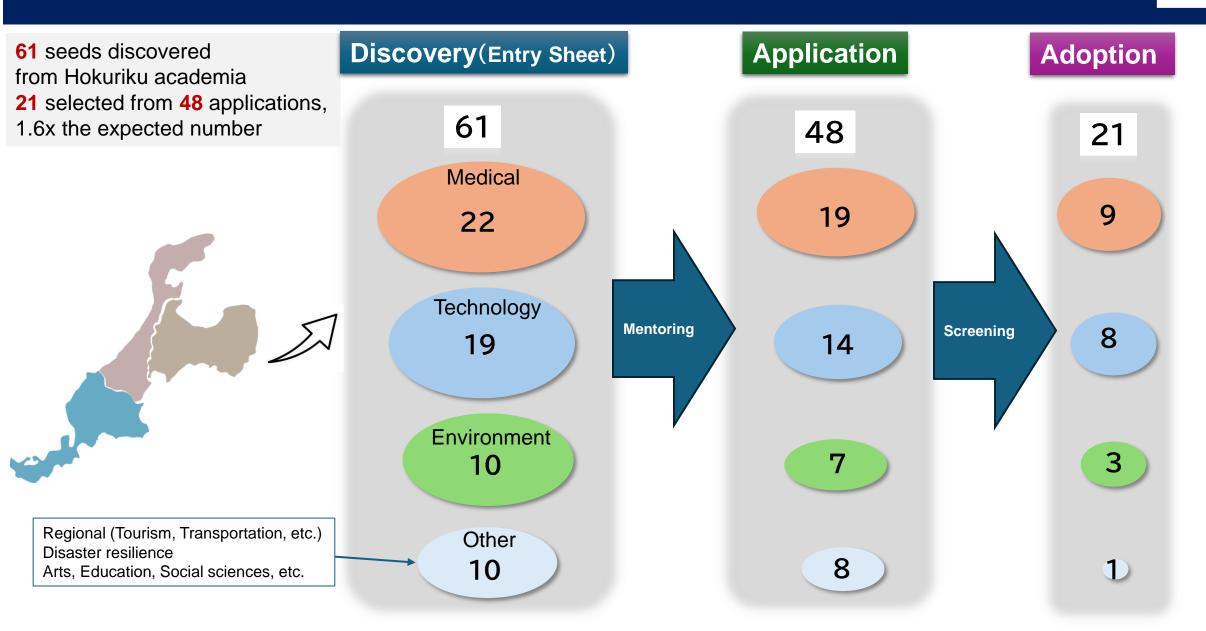
	Hokkaido	Tohoku	Hiroshima	Kyushu	Tokyo	Nagoya	Kyoto-Osaka- Kobe
Number of Adoption(2022)	17	29	19	27	17	22	27

Scale of SU Creation Program for 2024-2027

	2024			2025				2026				2027				
Group	Application	Step1 Adoption	Step2 Adoption	SU Creation												
I:Innovation	20	10	3	0	22	11	3	0	24	12	3	2	30	13	3	2
B:Breakthrough	10	5	0	0	10	5	1	0	10	5	1	1	13	5	1	1
T:Transformation	0	0	0	0	3	1	0	0	5	2	0	0	5	2	1	1
Total	30	15	3	0	35	17	4	0	39	19	4	3	48	20	5	4
Adoption rate(%)		50	10			49	11			49	13			46	10	

Progress on Step 1 in 2024

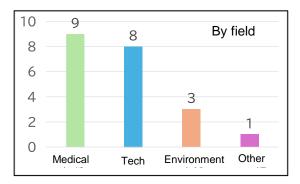


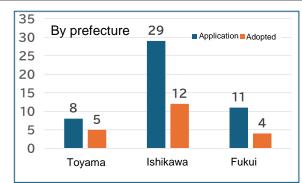


21 startup seeds from Hokuriku academia in 2024

Medical

	Affiliation	Subject						
1	JAIST	点眼によって後眼部疾患を治療する革新的ナノ粒子の事業化						
2	Kanazawa Univ.	摂食障害の治療を目的とした治療用アプリの研究開発と社会実装						
3	Univ. of Toyoma	単一細胞種の簡易分離デバイスの商品化						
4	Univ. of Toyama	有効な治療法がない希少疾患に対する増悪分子メカニズムに即した抗 体医薬の創生						
5	Univ. of Fukui	網膜虚血性疾患治療薬の開発						
6	Fukui Prefectural Univ.	微生物由来ポリカチオン性ペプチドを応用したバイオ医薬の消化管吸収 と経口投与法の開発						
7		細胞技術と生体模倣システム(MPS)を組み合わせた動物実験代替のための各種臓器細胞パネルの展開事業						
8	Kanazawa Medical Univ.	特定波長光照射による精子活性化装置の開発と事業化						
9		生物標本透明化キットの事業化検証						





Tech/Environment/Others

	Affiliation	Subject
1		ソフトロボットハンドを搭載した収穫ロボットアームと収穫動作システム の事業化
2	JAIST	トンボプロペラが提供する安全かつ効率的に運用可能なドローンシステム事業の提案
3		プラスチックの酸化劣化に悩まされない世の中へ ― 超効率的スクリーニングによる相乗効果を最大限に引き出す安定化剤配合の探索
4		極限の宇宙環境下でも安定駆動可能な電源装置
5	Kanazawa Univ.	現在も他の誰も開発できていない世界初・反転層ダイヤモンド MOSFETを用いた宇宙半導体事業創出
6		安全性が高く環境コストも低減させる重金属汚染土壌の化学浄化方式 の樹立
7	Univ. of Toyama	高機能糸状菌を活用した第二世代バイオマスリファイナリー事業
8	Toyama	ナノニードルパッチのビジネスモデルの創出
9	Prefectural Univ.	AIフロントセンシングビジネス
10	Fukui Prefectural Univ.	サバ完全養殖実用化研究計画(通称:さばイバル・プロジェクト)
11	Kanazawa Institute of Tech	最大積載量50kg・飛行距離50km超のVTOL型有翼電動ドローンの事業
12	Fukui College	特別支援が必要な子どもと全ての関係者のためのスマートシステム

Program Head of Directors, TeSH, JAIST UCHIDA Fumihiko f-uchida@jaist.ac.jp

