

***Industry and University
Cooperation
Challenges of Hirosaki University***

November 5 ,2015

Hirosaki University

Vice President

WAKE Taiji

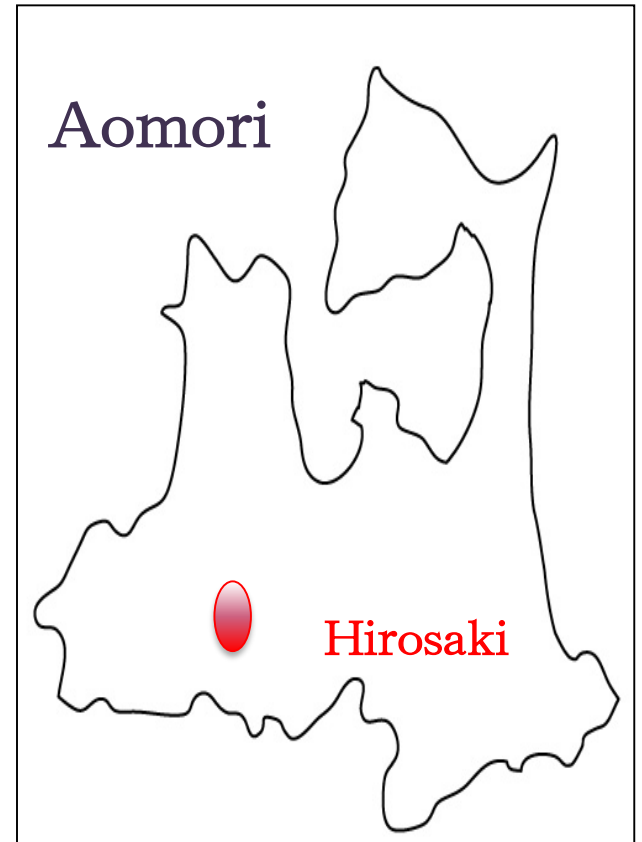
This presentation covers:

- Introduction of Hirosaki University
- Industry and University Cooperation at Hirosaki University:
 - (1) The Center of Healthy Aging Innovation
 - (2) “Kurenai no Yume”
- Conclusion

Introduction of Hirosaki University



Where is Hirosaki City?



Hirosaki City

Population: 180,000



Hirosaki Castle “Cherry Blossom Festival”





“Neputa Festival” in summer



Mt Iwaki





Best Apple – Producing District in Japan







Hirosaki University

- A national university established in 1949
- Faculties:
Humanities, Education,
Medicine,
Science and Technology,
Agriculture and Life
Science.
- Students: 6,991



“Establishing a Global Identity Creating with the Community”



世界に発信し、地域と共に創造する

***Industry and University
Cooperation at Hirosaki
University (1)***

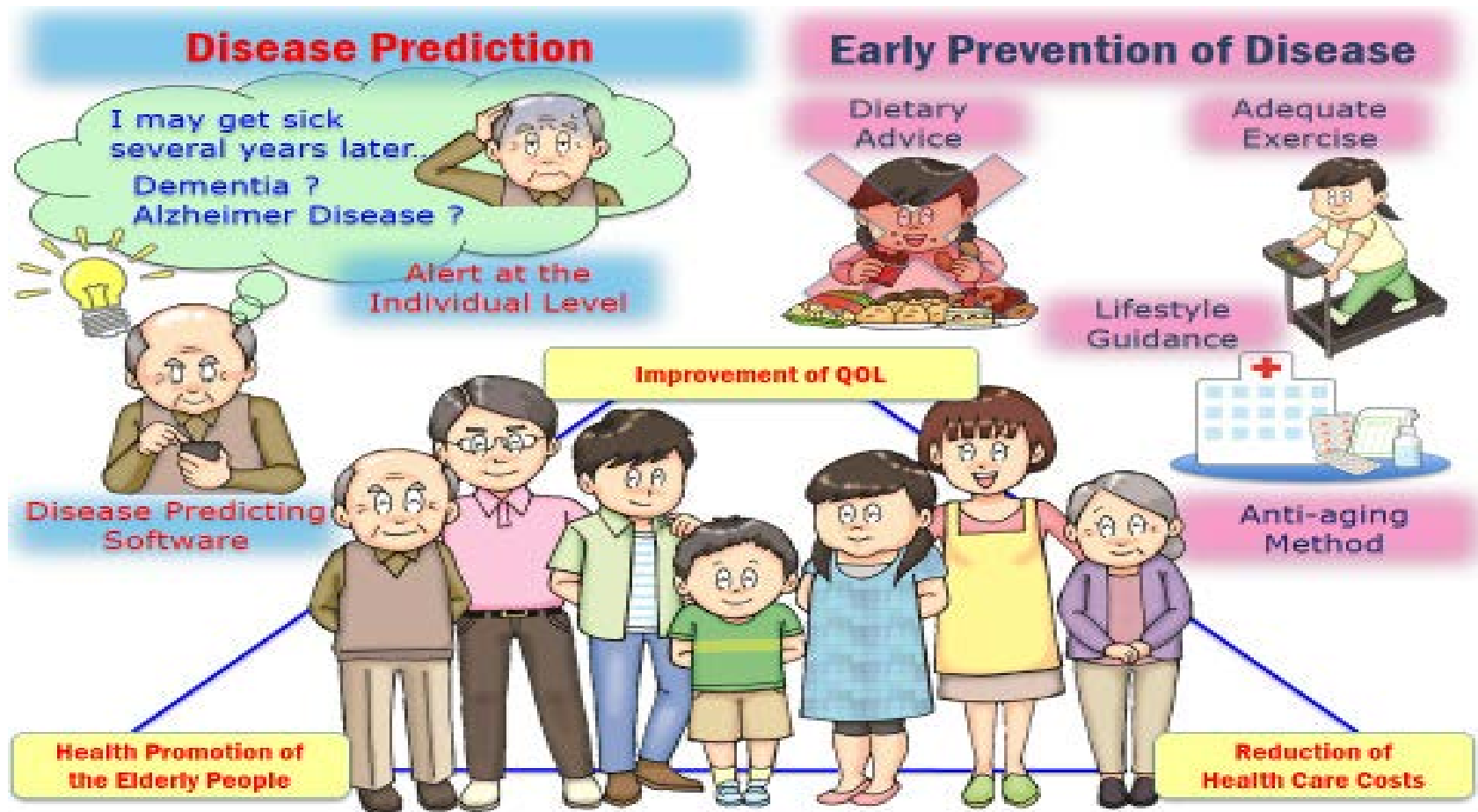
***The Center of Healthy Aging
Innovation***

Challenge of COI program

“COI STREAM”

- **MEXT** launched **COI STREAM** (Center of Innovation S&T based Radical Innovation and Entrepreneurship Program) in **2013**.
- **Hirosaki University** was selected as **one of 12 COI sites**.

Development of an innovative strategy for disease prediction and prevention by combining neuroscience research and analysis of “big health data”



Iwaki Health Promotion Project

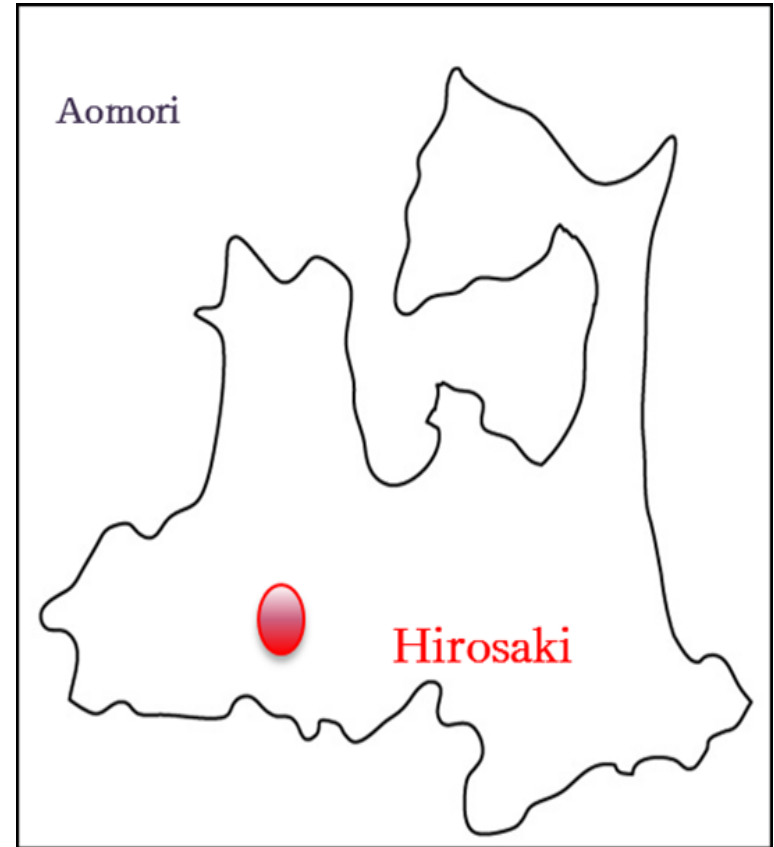
- The life expectancy of Aomori prefecture has remained the shortest among all 47 prefectures for a long time.

Life expectancy

		1990	2000	2010
Male	Aomori	74.2	75.7	77.3
	Japan	75.9	77.8	79.6
Female	Aomori	81.5	83.7	85.3
	Japan	81.9	84.6	86.3

Iwaki Health Promotion Project

- Comprehensive study for prevention and clarification of etiology for modern diseases
- Modern diseases such as lifestyle-related diseases, dementia etc. are multifactorial, and closely related, in a complex manner, to our modern life.





プロジェクト健診会場



プロジェクト健診受付



振動覚検査



四肢血圧測定



Collection of “Big Data” at Iwaki Health Promotion Project









The Center of Healthy Aging Innovation

1. Detecting the symptoms of dementia using big data



2. Prophylaxis system based on symptoms

Innovation



Cultivate an environment for local governments and companies to promote health easily

Foundation of an innovative “Health-power promoting center”

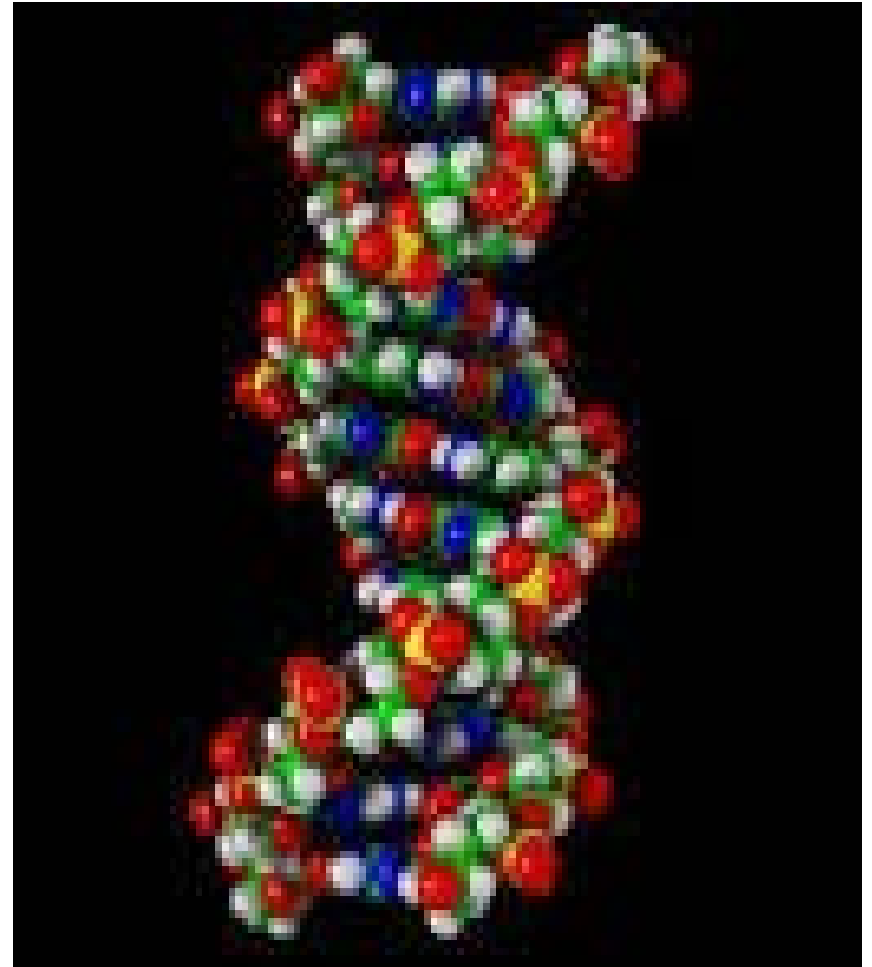
1. Detecting the symptoms of dementia using big data

- Develop software for detecting symptoms
- Analyzing and using the cohort study data



Activities 1-1

- ***Hirosaki University:*** behavior and pathology analysis, making use of 10 years of residential health data from an early stage, effectively combining the three services, and gathering new data such as genomic data
- ***Maruman Computer Service:*** structure the system



Activities 1-2

- ***GE Healthcare Japan***: Develop the algorithm and software
- ***Claro***: develop pathological image apparatus
- ***TOHOKU CHEMICAL***: Omics analysis
- ***Aomori Prefecture and Hirosaki City*** :Support the project generally

2. Prophylaxis system based on symptoms

- Educating new health promotion, investigating a way to popularize it, implementing health-promoting activities
- Structure a warning system based on symptoms



Activities 2-1

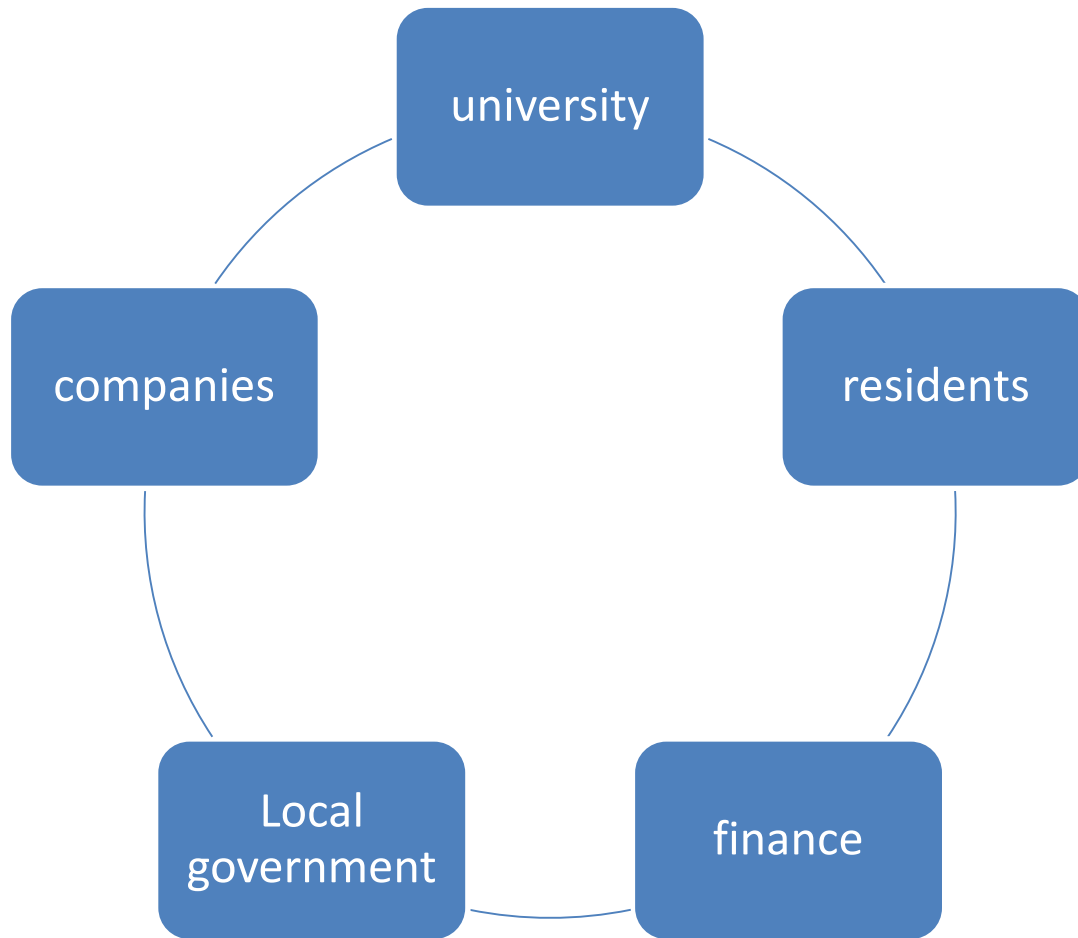
- ***Hirosaki University***: Large-scale cohort study, forefront analysis of stress response, technology for improving breeds, analysis of functional ingredients, and study of food function
- ***Maruman Computer Service***: Structure the system for regional cooperation

Activities 2-2

- ***Aomori Prefectural Industrial Technology Research Center***: Analysis of functional ingredients
- ***Aomori prefecture and Hirosaki City***: Support the project generally



Health-Power Promoting Center



***From Aomori to Japan, then
to the World !***

URL <http://coi.hirosaki-u.ac.jp>

E-mail coi_info@cc.hirosaki-u.ac.jp

Industry and University Cooperation at Hirosaki University (2)

Kurenai no Yume



Kurenai no Yume

- Kurenai no Yume, literally “crimson dream”, is a red flesh apple cultivar developed by Hirosaki University. As part of an apple development project that began in 1981, this particular hybrid was first bred in 1994.





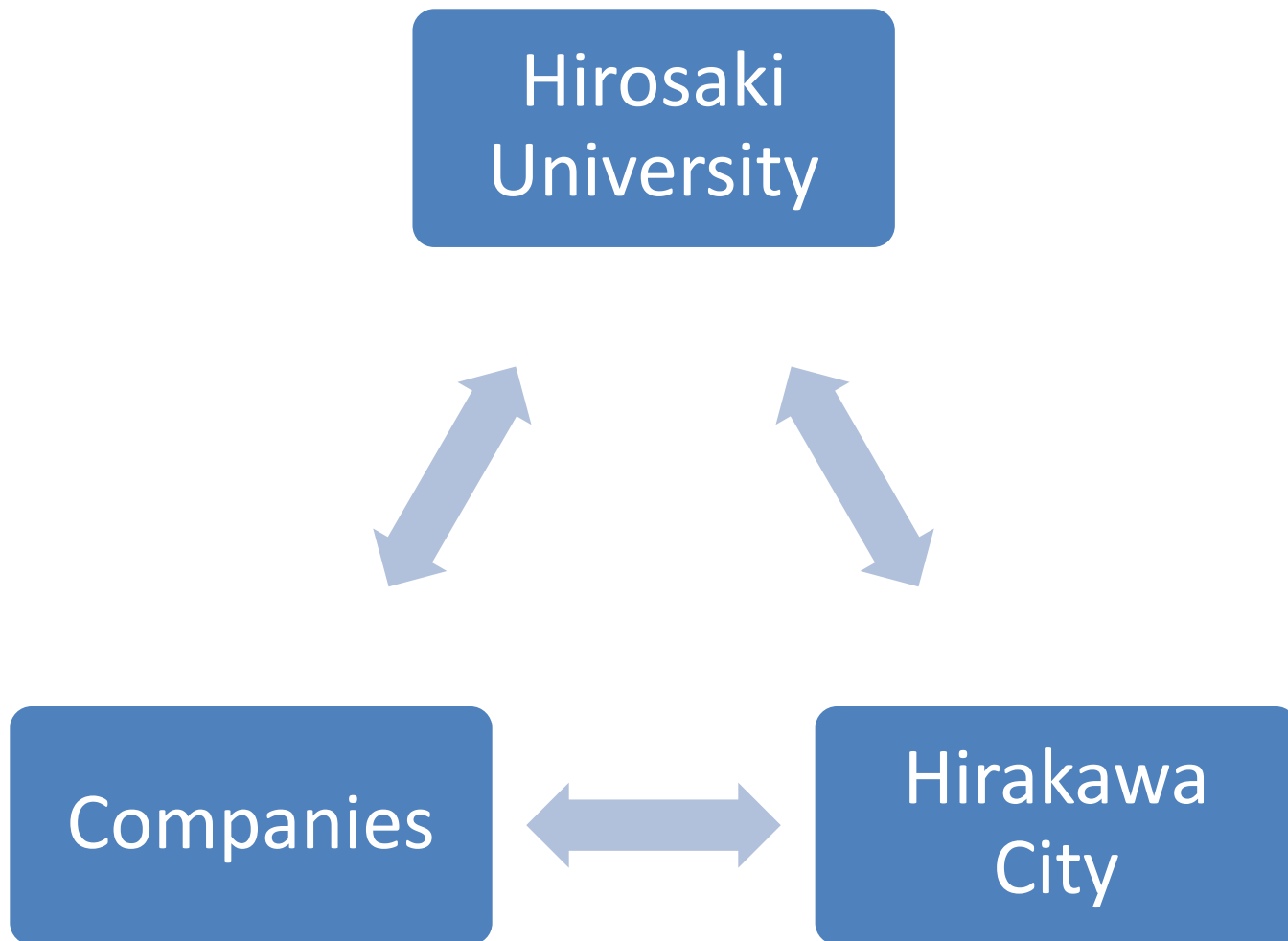




The Kurenai no Yume Promotion Committee, established in 2013, by **Hirosaki University** and **Hirakawa city**.

To unite specialists in cultivation, food functionality, and branding with **coordinators** of the university and local communities, **professionals** dealing with intellectual property, **local authorities, producers, processors, distributors,** and **seed producers** to promote Kurenai no Yume to the rest of the country.





<http://nature.cc.hirosaki-u.ac.jp/kurenainoyume/english.html>

Conclusion



***Thank you for your
attention***

Terima kasih