

Spring 2024

LITTERAE POPULI

A news magazine presented by Hokkaido University



Recent News from Hokkaido University



Litterae Populi

Litterae Populi is a bi-annual magazine with the latest news about Hokkaido University. Its name is Latin for "letters of the poplar trees."

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Photo of Center of Education and Research for
Hokkaido Wines



Feature: Food Culture Cultivated by Hokkaido University

Hokkaido University, set to celebrate its 150th anniversary in 2026, has continuously confronted the subject of food head-on since its inception as Sapporo Agricultural College.

We vow to keep proposing a new food culture that closely aligns with societal changes.

Here we present three initiatives under the theme of “food culture cultivated by Hokkaido University.”

Chapter 1: Wine

Chapter 2: The Hokudai Shorthorn

Chapter 3: The Hokudai Raspberry



Chapter 1:

Wine

The Center of Education and Research for Hokkaido Wines, inaugurated in Elm Forest on the Sapporo Campus, stands as a cornerstone for advancing wine research and nurturing wine industry professionals. It underpins the journey of Hokkaido's wine industry toward global recognition.

The wine storage showcases a collection from more than 50 Hokkaido wineries, highlighting the increasing diversity of the region's wine



Reviving a historic building as a hub for wine education and research

The historic building of the former Department of Entomology and Sericulture on the Sapporo Campus underwent preservation and renovations to be reborn as the Center of Education and Research for Hokkaido Wines, in September 2023.

The impact of global warming has expanded the range of grape varieties that can be grown in Hokkaido, leading to a surge in the region's winery count. In April 2022, the Hokkaido Government launched the Hokkaido Wine Valley initiative—a collaborative effort between industry, government, academia, and financial institutions—to elevate Hokkaido to global prominence as a wine-producing region. This initiative marks a new chapter in the region's viticultural journey. The Center of Education and Research for Hokkaido Wines is expected to play a key role in this initiative.

The building features three areas. In the central Gallery

Space, the ceiling's design highlights beams dating back to its 1901 construction, now meticulously repaired and left exposed. For the ceiling plywood and flooring, timber from the University's research forests was used. This space is set to open to the public in 2024 for wine tastings.

The Promotion Hall, marked by its intricately restored openwork chandelier base, serves as a venue for wine-related seminars and various other events.

At the Innovation Lab, a research facility, comprehensive studies are conducted on factors crucial to winemaking, such as soil and microorganisms, and support is offered to vintners/viticulturists. Equipped with advanced analytical instruments, the lab enables the swift measurement of various parameters, including sugar and acidity levels, in small-volume juice samples. This facility provides a valuable resource for those producers who may find independent analysis challenging, allowing them to bring in juice or wine samples for assessment.

Located behind the center building, the former Insect Specimen Room has been transformed into a wine



storage area. This area includes a wine cellar that is equipped with a cold-water-based air conditioning system for optimal wine preservation, and that is able to store approximately 1,800 bottles. Professor Teruo Sone, director of the Center of Education and Research for Hokkaido Wines and head of the Research Faculty of Agriculture's Laboratory of Applied Molecular Microbiology, enthuses about the future, "Ultimately, we aim to establish a wine bank that can store products from wineries across Hokkaido for extended periods to increase their value."

Research contributing to the enhancement of Hokkaido wines' value

Wine production encompasses myriad research topics, from soil and climate to microorganisms and marketing. The strength of Hokkaido University, a comprehensive, research-oriented institution, lies in its capacity for multifaceted approaches to winemaking. Professor Sone delves into wine research from diverse perspectives while grounding his work in his specialty of microbiology.

From a microbiological standpoint, the primary goal is to develop technologies that ensure stable production. In wine fermentation, yeast and lactic acid bacteria play crucial roles, but the absence of sterilization means that microorganisms naturally present on the grapes can significantly impact the final aromas. This effect potentially imparts a unique character reflective of the wine's origin; but, if not adequately controlled, can lead to adverse outcomes such as undesirable aromas. Professor Sone is keen on elucidating the types and functions of microorganisms involved in the vinification process and controlling them to establish reliable winemaking techniques. He has collected more than 500 strains of yeast native to Hokkaido, and is working to elucidate their characteristics. In pursuit of advancing this research, he intends to obtain a license for experimental winemaking within fiscal year 2024.

Professor Sone emphasizes health benefits as a significant characteristic of wine. In collaborative research with the University of California, Davis, clinical trials involving red wines produced by Hokkaido winemakers have demonstrated that certain wines can lower the drinker's blood pressure.

The health benefits of red wine go well beyond lowering blood pressure and are widely recognized. The Mediterranean diet, a culinary style deemed beneficial for health, incorporates red wine alongside olive oil and pulses. Professor Sone comments, "It would be interesting if a Hokkaido cuisine that combines local ingredients with wine were to give rise to a food culture that paired local dishes with wine."

Cultivating Hokkaido wine in Elm Forest

Professor Sone says that wine serves as a symbol of a region and reflects climate and terroir (the environmental factors that affect the crops and wine characteristics).



Professor Sone, director of the Center, at the Promotion Hall

Furthermore, wine has a deep connection with food. By encouraging people to explore various parts of Hokkaido for wine and food pairings, tourism can be developed, leading to job creation. This, in turn, will encourage young people to settle in the region, contributing to its revitalization.

The Center of Education and Research for Hokkaido Wines will continue to support the development of Hokkaido's wine industry as a hub of wine education and research that enriches food culture and promotes regional development, and as a gathering place for the appreciation of wine.



The Center of Education and Research for Hokkaido Wines, nestled in Elm Forest



The Gallery Space, slated to open to the public in 2024



The Innovation Lab offers support to producers in addition to research on winemaking

Chapter 2:

The Hokudai Shorthorn

The Japanese Shorthorn— a rare breed of Wagyu— that is reared at the Shizunai Livestock Farm, was branded the Hokudai Shorthorn in 2021. Celebrated as “an edible research outcome,” it has a rich flavor that has won the hearts of many people.

Feature:
Food Culture Cultivated
by Hokkaido University

Rare cattle reared with traditional husbandry methods

The Shizunai Livestock Farm, known for rearing the Hokudai Shorthorn, is located in Shinhidaka Town, about 150 km southeast of the Sapporo Campus. Covering more than 470 hectares, the farm is home to approximately 150 head of beef cattle and about 100 horses. Since its establishment in 1950, the farm has dedicated itself to a broad array of educational and research activities, extending beyond livestock farming to include grassland management and environmental conservation.

Japan relies on imported feed for over 90% of its beef cattle production. In contrast, the Shizunai Livestock Farm leverages its extensive terrain to enable cattle to graze freely outdoors from spring to autumn. They are raised exclusively on pasture grass without the use of any grain feed. In winter, they are fed mainly on farm-harvested hay and silage, with only very small amounts of supplementary grain. The manure from the cowsheds is recycled as compost for the pasture and fodder fields. Associate Professor Masahito Kawai, director of the Shizunai Livestock Farm at the Field Science Center for Northern Biosphere, says, “Domestic herbivores convert grass, which is indigestible by humans, into meat and milk. Our research is guided by a concept passed down for generations that focuses on raising herbivores in ways that make the most of that ability.” More than 98% of the Wagyu cattle raised domestically are of the Japanese Black breed, making the Japanese Shorthorn a truly rare breed. Japanese Shorthorn are reared solely on grass, including wild grass, and have an exceptionally high capacity for milk production among beef cattle. They are well-suited for grazing, because calves allowed to graze with their mothers can be raised on milk alone. Current research at the farm includes the study of livestock farming technologies aimed at minimizing stress on cattle during

transitions from pasture to cowshed and back at the change of seasons, to increase beef cattle production efficiency.

Savoring research achievements and the stories of such achievements

Hokudai Shorthorn beef once sold at incredibly low prices as “Hokkaido-produced Shorthorn,” without any recognition of its rearing by Hokkaido University. The turning point came when a company that had been purchasing and selling Shorthorn beef from Shizunai Livestock Farm suggested selling it at its appropriate value as beef cattle raised by Hokkaido University. This suggestion sparked discussions in partnership with the Institute for the Promotion of Business–Regional Collaboration, among other organizations, about branding the beef.

Since the beef was branded in 2021, the processed meat has been available for purchase online and through other channels. It is also offered at Café de Gohan, on the Sapporo Campus, and in nearby restaurants. Mainly pasture-reared, the Hokudai Shorthorn is known for its lean meat with minimal marbling, which makes it refreshingly easy to eat. The meat’s rich umami and aromatic flavors intensify with each bite.

Former Hokkaido University employee Manabu Sasaki, who serves as president of Wacca Inc., a company selling processed Hokudai Shorthorn beef, says, “I’ve been a fan of the beef from the Shizunai Livestock Farm since the time it was sold only within the University. I want people to know about the availability of beef from cattle raised under traditional husbandry, and I want people to enjoy it along with its story.” Wacca Inc. actively participates in exhibitions related to the SDGs, the Yosakoi Soran Festival,



Associate Professor Masahito Kawai, director of the Shizunai Livestock Farm



Hokudai Shorthorn beef sold online (Courtesy of Wacca Table)



Hokudai Shorthorn cattle graze at the Shizunai Livestock Farm
(Courtesy of Field Science Center for Northern Biosphere)

the Sapporo Snow Festival, and other events, promoting the taste of Hokudai Shorthorn beef as well as research on sustainable livestock farming. Sasaki also supports students who want to offer Hokudai Shorthorn beef at the Hokkaido University Festival, by providing culinary guidance. He says: “Because I’m eager to see more students prepare Hokudai Shorthorn beef at the Hokkaido University Festival, I actively promote it to those who show interest. I aim to continue supporting communication between Hokkaido University and the local community, not only regarding food, but also regarding the dissemination of various research findings.”

Savor beef from the Hokudai Shorthorn and learn about stock farming

The branding of the Hokudai Shorthorn led to increased opportunities for Farm Director Kawai to be invited to

speak at academic conferences and symposiums and to be featured in various media. Following the introduction of Hokudai Shorthorn beef to school lunches at all elementary and junior high schools in Shinhidaka Town, several elementary school students even visited the farm.

Kawai remarks, “I hope that eating beef from the Hokudai Shorthorn, which is raised differently and tastes distinctly different from the beef that’s usually eaten, will provide an opportunity for people to gain even a slight interest in livestock farming and livestock food products.” He also shares his vision for the future: “Some overseas universities have departments tasked with opening research farms to the public, with staff employed for this purpose. We hope that the Shizunai Livestock Farm will play a similar role, enabling us to welcome more visitors.” He believes that one of the farm’s charms is the way the Hokudai Shorthorn cattle blend into the mountain landscape. We may soon have more opportunities to witness this beautiful sight.



Manabu Sasaki, president of Wacca Inc.
(Courtesy of Wacca Table)



Hokudai Shorthorn beef was provided for school lunches at all elementary and junior high schools in Shinhidaka Town (Courtesy of Field Science Center for Northern Biosphere)



Chapter 3:

The Hokudai Raspberry

The Hokudai Raspberry, developed on a Hokkaido University experimental farm
(Courtesy of Sunagawa Orchard)

The Hokudai Raspberry, which originated at Yoichi Orchard, an experimental farm of Hokkaido University, is the fruit of a collaboration where researchers and students of the University teamed up with farmers from Yoichi Town to challenge conventional wisdom about raspberries.



Challenging the status quo where over 90% of raspberries sold in Japan are imported

Located in Yoichi Town, about 60 km west of Sapporo, Yoichi Orchard has been an experimental farm of Hokkaido University since 1912, engaging in research on approximately 60 varieties of fruit, including apples and haskap berries. Raspberries, referred to as framboise in French and seiyou kiichigo (Western bramble) in Japanese, not only add a sweet and sour taste, but also give a rich aroma to culinary creations. Despite their popularity in Japan, particularly in cakes and confections, over 90% of raspberries used in Japan are imported. The main sources of raspberries are Europe and America, as Japan's hot, humid climate makes the berries prone to mold and disease. Thus, the conventional wisdom has been that their domestic cultivation is challenging, with necessary investments in infrastructure like plastic greenhouses driving up costs, rendering competition with imported raspberries a formidable task.

Well over a decade ago, during some fieldwork, Professor Yoichiro Hoshino of the Field Science Center for Northern Biosphere noticed brambles growing

wild in Hokkaido. Recognizing the lack of progress in improvements to domestic raspberry cultivars despite their widespread availability in the Japanese market, Professor Hoshino embarked on research with his students in 2007 to develop new cultivars that would be both flavorful and easy to cultivate in Hokkaido.

Professor Hoshino and his team studied the characteristics of five bramble varieties native to Hokkaido and 14 raspberry varieties from Europe and America, undertaking more than 100 cross-pollination experiments. They collected pollen from raspberry flowers, gently opened the petals of flower buds of native varieties, removed the



Experiments with the Hokudai Raspberry (Courtesy of Professor Yoichiro Hoshino)

stamens, and then pollinated the stigma. To prevent cross-pollination with other pollen, each flower bud was then covered with a bag. This meticulous manual work was diligently performed by the students. After the fruit developed, DNA analysis was conducted to ensure the accuracy of the cross-pollination. The team also analyzed the resulting fruit for yield, size, acidity, sugar content, and individual aromatic components.

As a result, the team developed new lines of raspberries that are disease-resistant, high-yielding, and superior in flavor and appearance. Four particularly outstanding lines were designated the “Hokudai Raspberry.” They also acquired the “twice-bearing” trait found in wild varieties, bearing fruit twice a year. Although they are smaller than raspberry varieties from Europe and America, Professor Hoshino is proud of these berries: “We focused on appearance and selected only the most beautiful ones. We’re equally confident in their flavor.”

Cultivating love for the Hokudai Raspberry in Hokkaido

Professor Hoshino devoted as much effort to promoting the use of the Hokudai Raspberry among farmers in Yoichi as he did to improving the raspberry varieties. He enlisted the support of the Yoichi Town Office to provide Hokudai Raspberry vines to local farmers who showed interest. Mr. Keiji Sunagawa, head of Sunagawa Orchard, which grows the Hokudai Raspberry, says, “The Hokudai Raspberry stands out from other varieties for its strong aroma and sweetness. Another advantage is that the



Raspberry & Chocolate Muffin (Courtesy of Kurumi-no-ki)

berries maintain their shape during harvesting. Given the aging farming population and the challenges of working on stepladders, the Hokudai Raspberry’s low vine height makes harvesting easy. Additionally, its resistance to diseases and pests reduces the need for pesticide application.” To promote the Hokudai Raspberry, Sunagawa Orchard began selling the raspberries at JAL (Japan Airlines)’s online shop in February 2024.

Moreover, the Hokudai Raspberry has found its way into products at Kurumi-no-ki, a bakery and goods shop in Yoichi Town, being featured in their Raspberry & Chocolate Muffin. Kurumi Takeuchi, the proprietor, says: “It was a real surprise to find domestically—even locally—grown raspberries available when I started my shop in Yoichi three years ago. The mild acidity of the Hokudai Raspberry pairs well with chocolate, making it perfect for sweets. Our muffins made with the Hokudai Raspberry are so beloved that we receive advance orders for them.”

After 15 years of development from basic research, the Hokudai Raspberry was finally trademarked in 2022. Professor Hoshino shares his enthusiasm: “My aim has always been to conduct research that would benefit others. It felt like walking a tightrope, but with the support of many people, we’ve reached this point, which I consider a miracle. I’m eager to continue promoting the Hokudai Raspberry.”



Hokkaido University-branded products infused with the wisdom of our predecessors

KINO Rikako
Manager
Institute for the Promotion of Business-
Regional Collaboration, Hokkaido
University

Hokkaido University markets various products under its brand, showcasing the institution’s research achievements and unique characteristics. Adorned with the university’s name and its trillium flower logo, the brand portfolio includes a diverse range of 276 items, including food and cosmetics. They are available at various campus locations, including the university co-op, cafés, and the Hokkaido University Museum.

Products leveraging the University’s agricultural expertise and research technologies include Hokudai Shorthorn beef, the Hokudai Raspberry, and Hokudai Milk from cows grazed on the farm at the Sapporo Campus. A unique characteristic of Hokudai Milk is its seasonal flavor profile: Summer yields a lighter, refreshing taste due to the cows’ diet of fresh pasture; winter brings a richer flavor from their consumption of hay and corn. This distinctive milk is served at Hokudai Marche

Café & Labo and at Museum Café Polus in the Hokkaido University Museum. Cookies and sweets crafted from Hokudai Milk are also available at Hokudai Marche Café & Labo. Not to be missed, Café de Gohan, located near the university’s main gate, offers delectable soft-serve ice cream made from Hokudai Milk.

Additionally, freshwater salmonids bred over several generations at the Nanae Freshwater Station near the Hakodate Campus are marketed as Hokudai Trout. These fish, not used in research, are raised in clean environments, leading to a taste with minimal fishiness and allowing the natural flavors of the flesh and fat to be fully appreciated. Smoked cherry salmon and landlocked salmon are among the products made from Hokudai Trout and are available at locations including the Oshima Fresh Market, near Fort Goryokaku in Hakodate.

“Hokkaido University-branded products are treasures that encapsulate the ancestral wisdom and rich history of the university,” says Kino. “We invite you to look for the trillium flower logo in shops, pick up our products firsthand, and experience a deeper bond with Hokkaido University.”





Interview with the president

Guest

MARUTANI Tomoyasu

Representative director and chairman, Secoma Co., Ltd.

Seicomart, a convenience store chain hailing from Hokkaido, continues its steady advance. Chairman Tomoyasu Marutani, who originally comes from the finance sector, has spearheaded the creation of a corporate group that encompasses the entire supply chain, from the production and procurement of raw materials to food manufacturing, wholesaling, logistics, and retailing. He now focuses on leveraging the Hokkaido brand to actively market products of that brand not just in Honshu, but also internationally.

President Kiyohiro Houkin, who is driving reforms to make Hokkaido University an unparalleled institution, interviewed Marutani about his life, business strategies, personnel development, and vision for the future, including the prospects for Hokkaido.

Promoting regional sustenance
over regional revitalization
through the development of
unique products leveraging the
appeal of Hokkaido ingredients

Born the son of a politician

Houkin: You and I were born on the same day in Hokkaido, truly living through the same times. You're from Ikeda Town, aren't you?

Marutani: I originally come from what used to be Shihoro Village. We moved to Ikeda Town when I was about two or three years old, after my father unexpectedly won the mayoral election there—a victory nobody saw coming. Growing up while in the spotlight as the mayor's son was something I found quite challenging in our tight-knit community.

Houkin: Can you recall any childhood memories?

Marutani: When I was a small kid, my father got into winemaking in Ikeda. I remember asking him why something so tart and sour could be considered delicious. His reply was memorable: "It's the flavor of the world, so get used to it." Another vivid memory involves delving into the philosophy books that filled my father's bookshelves. Those books were challenging, but I was fascinated by the challenge of deciphering them with the help of a dictionary in my junior high years.

Houkin: Given that your father was a prominent figure in town, I imagine it might have been challenging for you to live a normal childhood. How did you view your father back then?

Marutani: When I was in high school, a TV crew that came to interview me about my father posed that exact question. I remember responding that I felt "a sense of awe" towards him. I admired him deeply, but our relationship was somewhat distant.

Houkin: After graduating from Hakodate La Salle High School and moving on to Keio University's Faculty of Law, did you have plans for the future?

Marutani: I'd toyed with the idea of becoming a lawyer or a politician, but being a lawyer just didn't seem like the right fit for me, and I wasn't too keen on all that studying either. As for going into politics, my father ended up getting elected to the House of Councillors later on. Seeing his election campaign up close really opened my eyes to its massive

responsibilities, the financial strains, and how much it could disrupt family life. The demands just seemed overwhelming.

Houkin: Having supported your father's election campaign, could you not have also envisioned a career in politics?

Marutani: I think my father wanted me to, but it's incredibly tough to stay true to the politics of integrity the way he did.

Houkin: I believe you'd have made an outstanding politician. Perhaps your father saw the potential in you and thus wanted you to pursue politics. After



Seicomart's product lineup shows a sense of commitment to regional characteristics that cannot be found at other convenience store chains.

– Dr. Houkin

graduating from university, you joined Hokkaido Takushoku Bank (Takugin).

Marutani: I also applied to a trading company, feeling that globetrotting would suit me well. The banking sector also seemed appealing, and I believed that working at Takugin would enable me to make a meaningful contribution to Hokkaido. My first two years at Takugin, engaging in new loans for the horse racing and breeding industries, were exceptionally fulfilling.

Houkin: Then you moved to Citibank, N.A.

Marutani: After Takugin declared bankruptcy in 1997, I spent a year on transitional tasks before officially joining Citibank in 1998.



Houkin: It sounds like you went through Takugin's bankruptcy firsthand.

Marutani: At that time, I was still relatively junior, so I wasn't in a position to understand everything that was going on. I believe there were strategies for dealing with and addressing crises, but Takugin wasn't entirely successful in executing them. My last work there involved finding new employment for my more than 80 subordinates.

Houkin: That's not an experience many have, for sure. Moving to Seicomart in 2007, after Citibank, marked a significant transition, especially considering how different the industries are.



Instead of “added value,” we’re focusing on “reduction value,” which is generated by reducing financial burdens on consumers.

– Mr. Marutani

Marutani: It's often said that the two industries are totally different, but I never let that bother me. Ultimately, the core principles of corporate management are the same. I felt no unease over practices like valuing employees and customers or employing organizational management methods, regardless of the industry. The presence of many young people and the welcoming attitude toward outsiders made working there extremely easy for me.

Opening stores where our competitors cannot

Houkin: Seicomart has garnered acclaim for its exceptional customer satisfaction in a fiercely competitive industry. What's your view on achieving this, and could you share insights into some business strategies?



Marutani: To thrive amidst intense competition, it's crucial to stay out of the fray. For example, when identical products are available across various stores, the stores with ample parking or proximity to stations naturally have an edge. Yet, by offering unique products, such as Seicomart's Hot Chef pork cutlet rice bowl and the G7 Series of wine, we can entice people to go out of their way to visit our stores. Because there are numerous product categories unaffected by fierce competition, we can pursue sustainable business management by offering unique products.

Houkin: That's quite interesting. Moving on, I'm curious about your community-based approach. In the convenience store industry, Seicomart seems unique in showcasing regional characteristics. How do you manage to offer varied product lineups across different regions, despite the industry's challenges in doing so?

Marutani: In my lectures, I often mention that community-based business management is easier said than done. For national chains, offering products with distinctive regional characteristics can be difficult, especially when efficiency is a priority. Our ability to use ingredients sourced from Hokkaido allows us to create fresh products that national chains can't. Beyond using locally sourced milk, ice cream, and vegetables for our prepared foods, our ownership of factories enables the production of distinctive items like Hot Chef rice balls filled with salmon caught off Nemuro. This approach allows us to maintain our uniqueness and flexibility.

Houkin: While other convenience stores may be taking similar initiatives, I get the impression that the level of commitment is quite different.

Marutani: Exactly. For instance, if someone in a



mountainous region wants ika soumen (thin strips of squid sashimi), we make it happen right away. This individual then makes the effort to visit our store, becoming a repeat customer who contributes to our sales. One person can transform into the equivalent of hundreds of customers. A thousand daily visitors translate to 365,000 over the course of a year. So, we can establish a viable market area even in sparsely populated regions. I believe this approach is what sets us apart from other convenience store chains.

Houkin: I'm interested in hearing about your engagement with the Sustainable Development Goals (SDGs). When did you become conscious of them and how have you approached them?

Marutani: When it comes to the SDGs, sustainability, and recycling, I believe it's crucial that we achieve them through our corporate activities. Reducing waste and utilizing resources lead to sustainability. For instance, in the process of cooking boiled eggs, about 5% end up cracked. We repurpose these into tartar sauce or sandwiches, minimizing waste and keeping prices low. We also recycle waste cooking oil from our Hot Chef kitchens into biodiesel fuel. Rather than adding value, we aim to cut costs while ensuring the profits needed for recycling. I refer to this approach as "reduction value," a term I coined to mean the opposite of "added value." It's about reviewing costs to reduce financial burdens on our customers while preserving our earnings (value). This approach becomes increasingly significant

as more individuals rely solely on social security income, especially with the advancing age of the population.

Human resource development and the 3D market

Houkin: I recently watched a program on NHK World-Japan titled "All-Rounder," which features a convenience store employee as the protagonist. The job isn't for everyone, as it requires a broad range of skills, including communication, inventory management, and even bathroom cleaning. I was surprised to learn that among international students, working at a convenience store is often seen as a high-status job. Developing such skilled personnel is a challenge, as language skills and other qualifications are required. Since watching this program, my perspective on convenience store staff has changed. Given that the success of companies hinges on their people, I'd be interested in hearing your approach to human resource development.

Marutani: At our Phoenix Academy, we provide customer service and etiquette training to all new staff members. The training incorporates methodologies used in the United States. It's uncommon for companies in Japan to offer such extensive training to part-time and temporary workers. For instance, when a customer arrives carrying items and struggles to open the door, our staff member will quickly come from behind the counter to assist. These actions often elicit words of gratitude. Our

Valuing uniqueness and regional characteristics aligns with Hokkaido University's goals.

– Dr. Houkin

HOUKIN Kiyohiro

President, Hokkaido University

Born in Hokkaido in 1954. Graduated from Hokkaido University School of Medicine. Doctor (medicine) (Hokkaido University). Worked for Hokkaido University Hospital and other facilities since 1979. After working as a visiting researcher at the University of California, Davis, became an assistant professor at the Hokkaido University Graduate School of Medicine in 2000, professor of Sapporo Medical University School of Medicine in 2001 and professor of the Hokkaido University Graduate School of Medicine in 2010. After becoming the director of Hokkaido University Hospital and vice executive president of Hokkaido University in 2013, and the director of Hokkaido University Hospital and vice president of Hokkaido University in 2017, assumed the present position in October 2020.



staff members value such thoughtful attentiveness, which I believe reflects the essence of Japanese hospitality.

Our stores are frequented by many regulars, fostering a sense of community that sparks lively conversations. This interaction is the heart of our service and the foundation of customer satisfaction. Ultimately, it all comes down to valuing both our customers and the communities to which they belong.

Houkin: Without fostering new communities, we can't build a new society. I've found your insights truly valuable.

To wrap up, I'd appreciate it if you'd share your vision for the future and any advice you might have for students at Hokkaido University.

Marutani: In the rural towns of Hokkaido, where aging and depopulation are advancing, it's essential to determine how to develop our business. It's important to see the market not just as one customer, but as 365 individuals, reflecting the diverse needs present every day of the year. Rather than focusing solely on the number of people, emphasizing the provision of a necessary lineup of products can deepen our market penetration. Therefore, employing this three-dimensional approach is key to unlocking our full potential.

Hokkaido holds great potential to become a key energy supply base, to see tourism develop through the extension of the Shinkansen bullet train line,

and to expand industry-academia collaboration. Our store in Shosanbetsu Village has seen increasing sales despite the declining population. Instead of lamenting population declines, we should focus on how deeply we can penetrate into local markets. I believe this potential exists across Hokkaido.

I use the expression "regional sustenance" rather than "regional revitalization." By sustaining communities, opportunities arise. This is the stance we ought to take not just as a retail business, but also as a food manufacturer.

I want Hokkaido University students to appreciate the value of learning in the vast environment that Hokkaido offers. Considering how to utilize local and regional advantages is crucial. As Hokkaido undoubtedly serves as a vital food supply base, I wish for them to apply what they've learned right here in Hokkaido. With the region's bright future, I look forward to Hokkaido University students finding places to shine in Hokkaido.

Houkin: From today's conversation, I've realized that the emphasis on uniqueness, awareness of regional characteristics, and sustainability has a lot in common with what Hokkaido University is striving for. I was particularly moved by the approach to developing human resources and envisioning Hokkaido's future in the context of current realities, which I find closely aligned with the principles of university management. Thank you for your time today.



I believe every region in Hokkaido has the potential to form a market.

– Mr. Marutani

MARUTANI Tomoyasu

Representative director and chairman, Secoma Co., Ltd.

Born in Hokkaido in 1954. Graduated from the Faculty of Law at Keio University. Joined Hokkaido Takushoku Bank, Ltd. in 1979. In 1998, transitioned to Citibank, N.A., where he held various roles, including that of head of the Customer and Talent Development Headquarters. Joined Seicomart Co., Ltd. (now Secoma Co., Ltd.) in 2007, was appointed executive managing director the same year, advanced to vice president in 2008, and was named president in 2009. Has held his current position since April 2020.



In the underground cellar of Katsunuma Winery
(Courtesy of Mercian Corporation)

Pursuing sustainable winemaking rooted in the terroir

Acting Director of Château Mercian Katsunuma Winery

TANZAWA Fumiko

| School of Agriculture – Graduate School of Agriculture Graduate |

Fumiko Tanzawa serves as the Manager of Preparation, overseeing the winemaking process at Château Mercian's Katsunuma Winery. Aiming to create wines that resonate with Japanese consumers, she believes that wine should be a drink that complements daily meals and that is deeply rooted in the local culture. She shared insights based on memories of her student days and on what she finds fulfilling about her work.

—What was your childhood like?

I was born and raised in Yamanashi Prefecture, renowned for its grape production. Growing up, I often volunteered to help with various tasks at my grandfather's vineyard, including performing gibberellin treatment to cultivate seedless grape varieties and engaging in the harvest. In my junior high school and high school years, I had a keen interest in math and science. Through compiling newspaper clippings, as assigned by a teacher, I found myself drawn to the field of food development. Coupled with my passion for eating, this interest led me to entertain the possibility of pursuing a degree in agricultural science and embarking on a career in the food industry.

—What are your memories of Hokkaido University?

As a first- and second-year student, I was on the administrative team for the Yuryo Festival, one of several events that make up the Hokkaido University Festival. I oversaw the organization of numerous food stalls along the Main Street. Driven by a desire to fully embrace the responsibility, I stepped up to lead the team in my second year. My role encompassed a wide range of responsibilities to ensure that the food stalls would operate safely and smoothly. This included overseeing food hygiene standards, negotiating with the university administration, coordinating with the fire department, and devising traffic management plans. Managing the team was a formidable challenge, filled with learning opportunities. Looking back, these experiences provided me with skills that have been immensely beneficial in my current profession.

—What research did you do at graduate school?

I focused on the study of carbohydrate-degrading enzymes in Professor Masayuki Okuyama's laboratory at the Research Faculty of Agriculture. I delved into the mechanisms behind the activation of enzymes that break down starch into sugars such as

glucose. Encouraged by my upperclassmen's belief that mastery in experiments with these delicate enzymes would prepare me for a broad spectrum of lab tasks, I dedicated myself to the research, convinced that it would also prove beneficial after I entered the workforce. I vividly remember a senior colleague who interviewed me when I applied for my job remarking later on how passionately I had discussed my research during the interview.

—Could you tell us about your work at Mercian?

I joined Mercian Corporation, a company specializing in the production and sale of wine and other alcoholic beverages, eager to apply the biochemistry knowledge I had gained at university. This decision was also influenced by a book my father recommended. For about five years, I worked on basic research that aimed at improving wine quality, and I was involved in factory quality management. Starting in 2017, I had the fortunate opportunity to study in Burgundy, France, for two and a half years. There, I marveled at France's extensive winemaking history and the diversity of its wines. I realized, however, that while French wines perfectly complement the butter-rich meat dishes of French cuisine, they might not pair as well with the everyday Japanese diet. This experience led me to conclude that it was not necessary to replicate everything. Instead, I became determined to create wines in Japan that would harmonize with Japanese meals and culture.

—You were appointed as the first female Manager of Preparation at Mercian in 2021, weren't you?

Yes, I was appointed Manager of Preparation to leverage the skills I'd honed in France. I'm responsible for overseeing the entire winemaking process, from drafting production plans and deciding the timing of grape harvesting to managing the winery's operational schedules and staff assignments. This position is particularly fulfilling, as it allows my judgment and ideas, which I formulate while closely monitoring the growth of grapes, to have a direct impact on the quality of our wines. Creating something together with my colleagues is a source of joy. Moreover, it's incredibly rewarding when our customers praise our wines after years marked by challenges such as adverse weather.

—What kind of winemaking do you aim for in the future?

I'm committed to pursuing winemaking that fully embraces Japan's climate and terroir. My goal is to craft delicious wines that are suited to our local conditions by selecting grape varieties that are well-suited to our terroir, minimizing labor and environmental impact, and employing a straightforward approach to winemaking. In doing so, I aim to achieve winemaking that's sustainable for both the community and the environment.

—Lastly, could you give a message to students at Hokkaido University?

Initially, I saw my academic pursuits in the lab and my involvement in club activities as totally separate. I've come to realize, however, that both have significantly contributed to my current endeavors. I encourage students to proactively pursue their interests, making the most of Hokkaido University's beautiful campus and its enriched environment. This, I believe, lays the groundwork for a fulfilling future.



Fumiko Tanzawa checks the growth of the grapes.
(Courtesy of Mercian Corporation)

PROFILE

In 2008, completed the master's program at Hokkaido University Graduate School of Agriculture. Began research at Mercian Corporation the same year to enhance the quality of Japanese wine. Started studying in France in 2017. Appointed as the first female Manager of Preparation at the company in 2021. Also serves as the Acting Director of Katsunuma Winery, and was interviewed for this article during this period. In April 2024, she assumes the charge of Production and Engineering, Production Management Department. Certified as an oenologist by the University of Burgundy. Received the 2015 ASEV Japan Technical Merit Award.

Moana Kitamura is a young pioneer tackling global warming. While still in her master's at the Graduate School of Fisheries Sciences, she is leading a startup company, Floatmeal Co., Ltd., as its CEO. She is addressing challenges such as global food security and climate change by leveraging duckweed, an aquatic plant in the genus *Wolffia*, as a sustainable protein source. She shared insights into her life as a student at Hokkaido University, her involvement with Floatmeal, and her aspirations for the future.

—Can you tell us why you chose the School of Fisheries Sciences at Hokkaido University?

I was born in New Zealand, and lived in Australia from my second year of elementary school until I returned to Japan in my second year of junior high school. My decision to pursue a degree in the School of Fisheries Sciences stemmed from my love of the sea and water, as well as my experience in Australia. When my family visited the Great Barrier Reef, a local college student shared their marine research with us, which sparked my interest in ocean studies. This experience guided my decision to enter a fisheries-oriented school for my career path. I was drawn to Hokkaido University because Hokkaido's natural beauty is reminiscent of Australia's, and because of the appealing prospect of learning aboard the training ships at the School of Fisheries Sciences.

—What did you focus on after enrollment?

First and foremost, my efforts were dedicated to Nitobe College, where I encountered truly meaningful programs. Among these, the Career Development Seminar stands out as particularly impactful. It was in this seminar that I declared my goal to seize every opportunity to challenge myself as much as time would allow, a declaration that propelled me into further ventures. During my sophomore and junior years, I participated as a tutor in a seminar regarding global warming. In my junior year, in particular, the rigorous preparation to participate in the Hakodate International Science Festival, which involved staying up all night every Sunday, served as a significant training experience for me. In my senior year, I took on the role of a tutor in a seminar dedicated to startups.

—Why did you decide to get involved with Floatmeal?

My journey with Floatmeal began when I volunteered at an on-campus program for an international business contest called "Hult Prize". A team focusing on *Wolffia*, a genus of duckweed, won the competition, laying the groundwork for what would become today's Floatmeal. Later, a casual conversation with one of the team members revealed their need for a Japanese-speaking supporter. Having been exposed to global warming issues at Nitobe College, I became interested in the team and decided to join—initially with a casual mindset. As I got more involved, I found myself drawn to the allure of being able to present solutions to global issues through my actions.

—What is the appeal of starting a business as a student?

Initially, I had no intention of founding a company. However, as our activities progressed, needs emerged to negotiate on an equal footing with university faculty and business professionals regarding intellectual property and product offerings, as well as to demonstrate our commitment to investors. To meet these needs, starting a business was the most appropriate choice. What stands out about founding a company as a student is the abundance of people willing to cooperate. We have received support from various individuals, including tax accountants and companies that provide us with free access to their facilities. Given the rarity of student entrepreneurs, we receive attention and various kinds of support, which I believe is a unique benefit of student entrepreneurship.

—Could you please share your goals for the future?

My goal is to confront the negative challenge of global warming with positive solutions. I hope to inspire others to also feel motivated to solve this issue. Moreover, as we navigate this challenge, I aim



At Hokkaido University Open Innovation Hub "ENREISO"

Shaping the future of the earth with duckweed

KITAMURA Moana

| 1st year, Master course, Graduate School of Fisheries Sciences |

to remain in a position where I can make impactful decisions and feel excited about contributing to the solution of global warming.

—Finally, do you have a message for current Hokkaido University students?

If something piques your interest, I encourage you to dive in wholeheartedly, as far as your abilities allow. Engaging in various experiences can lead you to discover what suits you best. Equally important is knowing when to step back. Personally, by decisively walking away from what I felt didn't suit me, I was able to focus on what I truly wanted to do. The choices we make shape us. So, I urge you to start with an open mind and to value what captures your curiosity.



Moana Kitamura and her colleagues from Floatmeal Co., Ltd., holding duckweed

PROFILE

Born in New Zealand in 1999. Enrolled in the School of Fisheries Sciences at Hokkaido University in 2019 and is currently a first-year master's student in the Graduate School of Fisheries Sciences. In May 2023, co-founded Floatmeal Co., Ltd., a startup tackling global warming and food issues. The company was doubly honored at the 6th Batch Demo Day of Open Network Lab Hokkaido, also known as Onlab Hokkaido, receiving the Best Team Award and the Audience Award.



A bridge between Hokkaido University and the world

This issue features contributions from Dr. Lulie Melling, who is active as a Hokkaido University ambassador in Malaysia, and Dr. John Yabe, who is active as a Hokkaido University partner in Zambia and Namibia.



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Dr. Lulie Melling

Director, Sarawak Tropical Peat Research Institute (TROPI), Ministry of Education, Innovation & Talent Development Sarawak (MEITD)

As an Ambassador, I have had the honour of introducing Hokkaido University in Malaysia and beyond at various events. We co-organised AsiaFlux2022, an international conference on flux studies, in Kuching, Malaysia, in September 2022. This collaboration between Sarawak TROPI and Hokkaido University has been instrumental in advancing research on CO₂ and CH₄ fluxes in tropical peatlands, an area where expertise in Malaysia is limited. As a result, we are now the first team in Malaysia with a comprehensive, long-term approach to monitoring greenhouse gas dynamics under different land uses in tropical peatlands.

I have also shared my experience of research, work and student life with the other international students at Hokkaido University to motivate and inspire them to keep going. I was able to encourage more

colleagues to continue their studies in master or doctoral programs at Hokkaido University.

I am deeply impressed and proud of Hokkaido University's commitment and remarkable dedication to advancing global education initiatives. Reflecting on my own time and the current situation, I appreciate how Hokkaido University has extended its efforts not only to Japanese students but also to international students from around the world.

TROPI's research activities have all been based on collaboration with Hokkaido University, which has made significant contributions to conferences, publications and events worldwide. I look forward to further collaboration in academic co-supervision and research training in the future.

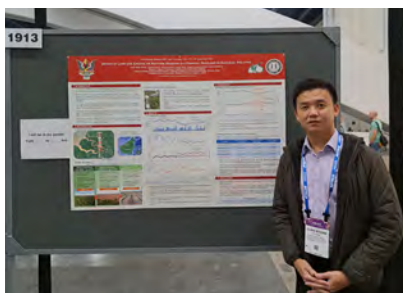
Notable events such as "AsiaFlux 2022" and the "Symposium of Current Status of Japan Graduates in Malaysia" have strengthened the relationship between Hokkaido University and Malaysia. These opportunities to share experiences have been invaluable in advancing our research endeavours at TROPI.

Despite the differences in climate, culture, language and cuisine, the common bond between Sapporo and Malaysia is evident through my family connections in both countries. My family connections also include sensei, laboratory mates and friends.

As the motto of Hokkaido University says: Boys, be ambitious! Let's embark on this academic journey with a shared commitment to excellence. Be ambitious, not for wealth or fame, but for a better future for our young leaders!



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1. Official launch of AsiaFlux 2022 in Kuching, Malaysia
2. Excursion to Maludam National Park during AsiaFlux 2022
3. Symposium of Current Status of Japan Graduates in Malaysia held in 2022
4. Hokkaido University alumni (Dr. Wong Guan Xhuan) presenting at the American Geoscience Union 2023 in December 2023



Dr. John Yabe

Senior Lecturer, School of Veterinary Medicine,
University of Namibia, Windhoek, Namibia

I was honored when I was asked to be a Partner of Hokkaido University that accorded me a platform to soar to greater heights in my career in addition to contributing to Hokkaido University. Alumni Association Zambia was launched in 2016 at University of Zambia in Lusaka, and I became Secretary of the association. Recently, I have been an active Partner in Zambia and University of Namibia (UNAM) where I am working.

As a Partner, I have actively promoted the university in my area of influence, which has helped to arouse enthusiasm in my students. Whenever I visit Sapporo, it gives me fulfillment to see my former students enrolled at Hokkaido University. The visit of Hiroaki Terao, Vice President at that time, during the launch of the association in Zambia made an indelible impression on me. This showed how significant our activities were considered.

Since completing my PhD studies at Hokkaido University over 10 years ago, I have continued collaborating with the Laboratory of Toxicology, Faculty of Veterinary Medicine, Hokkaido University in lead poisoning research in Zambia. This led to the joint research project entitled “Kabwe Mine Pollution Amelioration Initiative (KAMPAI)”



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from 2016-2022. As Team Leader, I coordinated research activities. Also, I have initiated research collaborations in environmental toxicology between Hokkaido University and UNAM leading to the signing of MOU in 2022. Moreover, in southern Africa, Hokkaido University is collaborating with Universities of Zambia, Zimbabwe, Namibia, and Botswana in a project to be called ZAZINAMBO, to tackle the impact of mining-related environmental pollution on One Health. As Regional Coordinator, I traveled through the region in 2022. Through these various activities, I cemented my role as a Partner, and my research career has been propelled to greater heights, where my contribution has been recognized among the world's top medical experts on Lead Poisoning.

I am impressed with the current educational initiatives at Hokkaido University, which demonstrates consistency in promoting research and education in Africa. The reputation in Zambia is entrenched owing to the establishment of the Hokkaido University Office in Lusaka and the large number of the graduates, who have excelled worldwide. In other countries like Namibia and Botswana, Hokkaido University is unknown, so I am enthusiastic to increase its visibility in the region.

During my student life, I benefited from the remarkable learning environment and have fond memories of ski excursions. Being a student from Africa, it was amazing how quickly I mastered skiing and enjoyed the annual excursions. I also became passionate about Japanese castles and toured Nijo-jo, Kinkakuji, Osaka, Kumamoto, Matsuyama castles, etc. Hoku-dai-sai (Hokkaido University Festival) was also a great event that enabled me to taste sumptuous menus from all over the world.

I have been in Windhoek, the capital city of Namibia, for 3 years. The city is completely different from Sapporo as it is mostly arid owing to desert conditions. As I write this, I am at Hokkaido University as an invited teacher braving one of the coldest winter days with blizzard conditions and looking forward to my trip back to the warmth of Windhoek.

Following the relaxation of travel restrictions after COVID-19 pandemic, I would like to urge Hokkaido University members to expand their horizons in unfamiliar territories including Lusaka and Windhoek.



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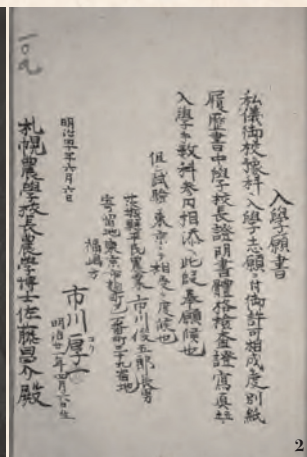
1. KAMPAI Project members in Kabwe, Zambia, 2017
2. With HU researchers about 1 km underground in a Botswana mine 2022
3. With HU staff and students at Sapporo Kokusai Ski Resort
4. With HU staff and students at Dune 7 in Namibia, 2023

150 years of Challenge

SCENE-20

1907-46

Koichi Ichikawa, a long-awaited
veterinary researcher



The first Japan Academy Prize recipient at Hokkaido University

The Japan Academy Prize (pre-war, the Imperial Academy Prize) is conferred by the Japan Academy (known in prewar years as the Imperial Academy) in recognition of outstanding research achievements. Among Japanese scholars, the award is considered as prestigious as the Nobel Prize. Throughout the prewar and postwar years, 24 researchers from Hokkaido University have been distinguished with this prize. The first of these recipients was Dr. Koichi Ichikawa, who was honored in 1919 alongside Dr. Katsusaburo Yamagiwa, a professor in the Faculty of Medicine at Tokyo Imperial University, for pioneering research entitled "Investigations on the artificial production of cancer." At that time, Ichikawa was a budding 31-year-old researcher who had been newly appointed as an instructor for a course on animal husbandry at the School of Agriculture, Hokkaido Imperial University.

A graduate student in Sapporo receiving guidance in Tokyo

Koichi Ichikawa (1888–1948) entered the preparatory course at Sapporo Agricultural College in 1907, the year the college was elevated to imperial university status as the Agricultural College of Tohoku Imperial University (now the School of Agriculture of Hokkaido University). After completing the preparatory course, he advanced to the regular course in 1910, where he enrolled in a course on animal husbandry. In July 1913, he graduated after submitting a thesis in German on parasites in Hokkaido livestock. After graduating, he remained in the college as an assistant. He also spent time in the Department of Pathology at Medical College (later known as the Faculty of Medicine) of Tokyo Imperial University, where he conducted research on the artificial induction of cancer under the guidance of Professor Katsusaburo Yamagiwa.

In November 1913, Ichikawa applied to the graduate school of the Agricultural College of Tohoku Imperial University. His proposed research theme was "Pathology with a focus on tumorigenesis." When the application was reviewed at a faculty meeting of the Agricultural College on November 11, Professor Kotaro Ogura from the animal husbandry course said that Ichikawa had been frequenting a laboratory at the Medical College of Tokyo Imperial University. Professor Ogura also

wished for Ichikawa to continue receiving guidance in Tokyo for at least one year after starting his graduate studies. Although there were objections to allowing a student enrolled in the graduate school in Sapporo to receive guidance at Tokyo Imperial University, the faculty ultimately approved his entrance to the graduate school and formally decided to proceed with requesting guidance for Ichikawa to the president of the Medical College of Tokyo Imperial University. This was extraordinary treatment for a graduate student.

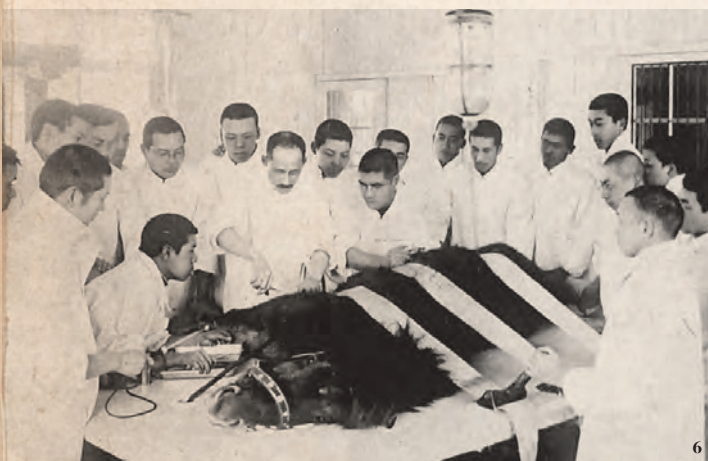
Hokkaido University's first doctor of veterinary medicine

There was a major reason for this special treatment of Ichikawa. Hokkaido's agricultural policy promoted farming complemented by livestock rearing, and Sapporo Agricultural College was tasked with cultivating the necessary human resources. Thus, developing veterinary specialists was a critical mission for the college. In 1878, the third year after Sapporo

"Exploring the stimuli that cause cancer is of utmost aimed at determining the existence of such facts and that lead to cancer development. (*Cancer Is Curable. Do Not*

Agricultural College opened, the American physician J. C. Cutter was invited to lecture on zoology and veterinary medicine. Moreover, Takajiro Minami, a student in the college's second graduating class who had been taught by Cutter, pursued veterinary medicine studies at the University of Tokyo after graduation. Later, however, after joining the faculty of Sapporo Agricultural College, Minami was unable to focus on veterinary medicine due to his duties as a farm supervisor and lecturer on a broad array of agricultural subjects. The college struggled to independently produce veterinary experts, eventually resorting to specialists hired from outside to teach veterinary medicine, including Giemon Sudo from Komaba Agricultural School, Kotaro Ogura from the Veterinary Department of the Agricultural College of Tohoku Imperial University (which later became Tokyo Imperial University), and Taiji Kato, a graduate from McGill University, Canada.

Given these circumstances, much was expected of Koichi



1. Koichi Ichikawa around the time of his graduation from the Agricultural College (1913).
2. Koichi Ichikawa's application for admission to the preparatory course of the Agricultural College of Tohoku Imperial University (1907).
3. Assistant Professor Taiji Kato (ca. 1912).
4. Professor Kotaro Ogura (ca. 1912).
5. The lecture hall for animal husbandry where Koichi Ichikawa studied (ca. 1912).
6. Practical training in veterinary medicine given by Assistant Professor Taiji Kato (ca. 1912).
7. The staff and students of the course on animal husbandry in the School of Agriculture at Hokkaido Imperial University (1935)
Professor Koichi Ichikawa is seated second from the right in the front row.
8. The Medical College of Tokyo Imperial University (ca. 1913)
The lecture hall for pathology that Ichikawa frequented is the building on the right in the foreground.
9. J. C. Cutter, who taught veterinary medicine at Sapporo Agricultural College (ca. 1880).

Ichikawa, who was aspiring to become a veterinary researcher. In 1919, upon receiving Ichikawa's application for the Doctor of Veterinary Medicine degree, the Agricultural College of Hokkaido Imperial University found itself in uncharted territory, as it had never awarded such a degree. After consulting with the Ministry of Education on the practicability of conferring the degree, the college held a faculty meeting on March 4 at which it was decided that the degree would be conferred. This decision made Ichikawa the first Doctor of Veterinary Medicine from Hokkaido University. Immediately thereafter, Ichikawa was appointed as an instructor in the course on animal husbandry.

Pursuit of research on carcinogenesis

During this period, Koichi Ichikawa, in collaboration with Professor Yamagiwa, achieved groundbreaking success by artificially producing cancer in rabbits' ears through the repeated application of coal tar. This milestone, reported at the Tokyo Society of Medical Sciences in September 1915, marked

importance for its prevention. Our experiments investigating the characteristics of the stimuli

Delay Treatment," edited by Koichi Ichikawa)

the world's first artificial induction of cancer. The significance of their work was recognized not only with the prestigious Japan Academy Prize, but also through international acclaim, as evidenced by Professor Yamagiwa becoming a candidate for the Nobel Prize in Physiology or Medicine on multiple occasions.

Seishichi Ohno, who was under Professor Yamagiwa's tutelage at the time, and later became a professor in the Department of Obstetrics and Gynecology at the School of Medicine of Hokkaido Imperial University, recalled: "Guided by Professor Yamagiwa, Ichikawa diligently and faithfully continued his experiments day in, day out. Known affectionately as 'the Ezo bear,' he seemed indifferent to being dirty and he virtually lived with rabbits, carrying them around the classroom and even to his leisure activities after lunch. He was truly a remarkable individual." Ichikawa was driven by a firm belief that cancer would invariably develop from the repeated application of coal tar to rabbits' ears, vowing to "continue the experiments

until the animals die and for as long as we have life."

Afterward, Ichikawa was promoted to assistant professor and then professor, overseeing the Department of Comparative Pathology in the Faculty of Agriculture. His research on the artificial induction of cancer focused on veterinary medicine for livestock while at the same time contributing to medical science in promoting an understanding of the mechanisms, prevention, and treatments of cancer in humans. In 1929, Ichikawa established the Hokkaido Cancer Society in collaboration with professors from the Faculty of Medicine and physicians from Sapporo City General Hospital. Serving as its first director, he also played a key role in promoting cancer prevention and treatment awareness.



Hokkaido University
HISTORY
1907-46

1907	September	Enters the preparatory course of Agricultural College of Tohoku Imperial University
1910	July	Graduates from the preparatory course; enters the regular course in September
1913	July	Graduates from the course on animal husbandry at the Agricultural College of Tohoku Imperial University After graduating, becomes an assistant at the college Frequents Professor Katsusaburo Yamagiwa's lab in the Department of Pathology at Medical College of Tokyo Imperial University
	November	Proceeds to the graduate school of Agricultural College of Tohoku Imperial University
1915	September	Along with Professor Katsusaburo Yamagiwa, reports their success in artificially inducing cancer at the Tokyo Society of Medical Sciences
1919	March	Awarded the Doctor of Veterinary Medicine degree from Hokkaido Imperial University Appointed as an instructor for a course on animal husbandry at the School of Agriculture, Hokkaido Imperial University
	May	Along with Professor Katsusaburo Yamagiwa, receives the Japan Academy Prize
1920	January	Appointed as an assistant professor at the School of Agriculture in Hokkaido Imperial University
1925	August	Becomes a professor at Hokkaido Imperial University
1929	September	Founds the Hokkaido Cancer Society and serves as its first director
1930	October	"Cancer Is Curable. Do Not Delay Treatment," edited by him, is published by Meibundo Books
1946	March	Retires from Hokkaido Imperial University

Hokkaido University Archives

This facility collects, classifies and preserves historical documents and records of Hokkaido University. It also conducts investigations and research on its history.

01

Establishment of the Office for Promotion of Semiconductor Hub Formation

On October 1, 2023, Hokkaido University established a new operational organization, the Office for Promotion of Semiconductor Hub Formation.

Amidst rapid advancements towards promoting the semiconductor industry in Hokkaido, the Office serves as a hub for collaboration among industry, academia, and government. It contributes to solving challenges at the national, regional, and industrial levels, while promoting semiconductor-related research and human resource development within the University.

Moving forward, the Office will build a solid

collaborative framework with external semiconductor-related organizations and will consolidate the semiconductor expertise of various departments. This initiative aims to develop a hub for advancing research and human resource development, contributing to the growth of the cutting-edge semiconductor industry in Japan.

A press conference on October 4 provided an overview of the Office's establishment purposes and missions, and introduced the distinctive semiconductor-related research activities of various university departments.



Press conference

Collaboration agreement with Tohoku University

02

On January 17, Hokkaido University and Tohoku University signed a collaboration agreement with the aim of leveraging each institution's unique features and educational and research resources. This partnership aims to foster talented individuals, enhance educational programs, and advance research through cooperation and collaboration.

Both universities have historically had similarities in their basic principles and visions, emphasizing and valuing practical learning. Their mid- to long-term visions call for the creation of social value with a global outlook.

Furthermore, the Hokkaido and Tohoku regions are playing a crucial role in human resource development in the semiconductor sector as the regions experience a rapid acceleration in efforts to develop infrastructure for the semiconductor industry.

Initially, the universities will focus on deepening collaboration in education and research related to semiconductors. They plan to develop human resources in the semiconductor field through the sharing of e-learning resources.



The signing of the collaboration agreement



President Houkin (third from left) and Tohoku University President Hideo Ohno (third from right) holding the collaboration agreement

03

Completion of Open Innovation Hub “ENREISO”

On September 29, 2023, Hokkaido University held the opening ceremony for its Open Innovation Hub “ENREISO.” This facility serves as a center where researchers and students from the University, as well as individuals from other universities, local governments, and corporations, can freely exchange opinions and create innovative solutions to societal and regional issues.

At the opening ceremony, President Kiyohiro Houkin expressed his expectations for the facility to serve as an incubator for startups and as a platform for initiatives aimed at community partnerships. After the ceremony, the attendees were invited on a tour of the facility. The first-floor presentation lounge will be used until 2026 as “ENLIGHT”, which aims to invigorate the Hokkaido University 150th Anniversary Project. Projection mapping that promotes the project was also displayed.

The facility is expected to play a pivotal role in bolstering collaboration among the industrial, academic, governmental, and financial sectors, while acting as a cornerstone for the effective dissemination of University information.



A ribbon-cutting ceremony attended by key officials



Projection mapping at “ENLIGHT”

Uryu Experimental Forest certified as a Nationally Certified Sustainably Managed Natural Site

04

On October 25, 2023, the Uryu Experimental Forest, covering an area of about 25,000 hectares, was certified as a Nationally Certified Sustainably Managed Natural Site¹ by the Minister of the Environment for its efforts to conserve biodiversity.

Established in 1901, this experimental forest has long been dedicated to the collection of biodiversity data, to research on combating the challenges of intensifying climate change, and to the implementation of forest management practices that take biodiversity into consideration. This certification recognizes the forest’s success in preserving pristine natural ecosystems and habitats of rare wildlife,

including endangered species such as the Japanese huchen (*Parahucho perryi*, also known as the Sakhalin taimen).

To realize a society based on sustainable well-being, Hokkaido University is making integrated efforts. We aim to contribute to the “30 by 30”² target and harmonize biodiversity conservation with climate change mitigation by leveraging our intellectual and physical assets.

- 1 An area certified by the national government (specifically, the Minister of the Environment) as a region that contributes to biodiversity conservation through private entities’ initiatives.
- 2 An international commitment to conserve at least 30% of land and sea for biodiversity by 2030.



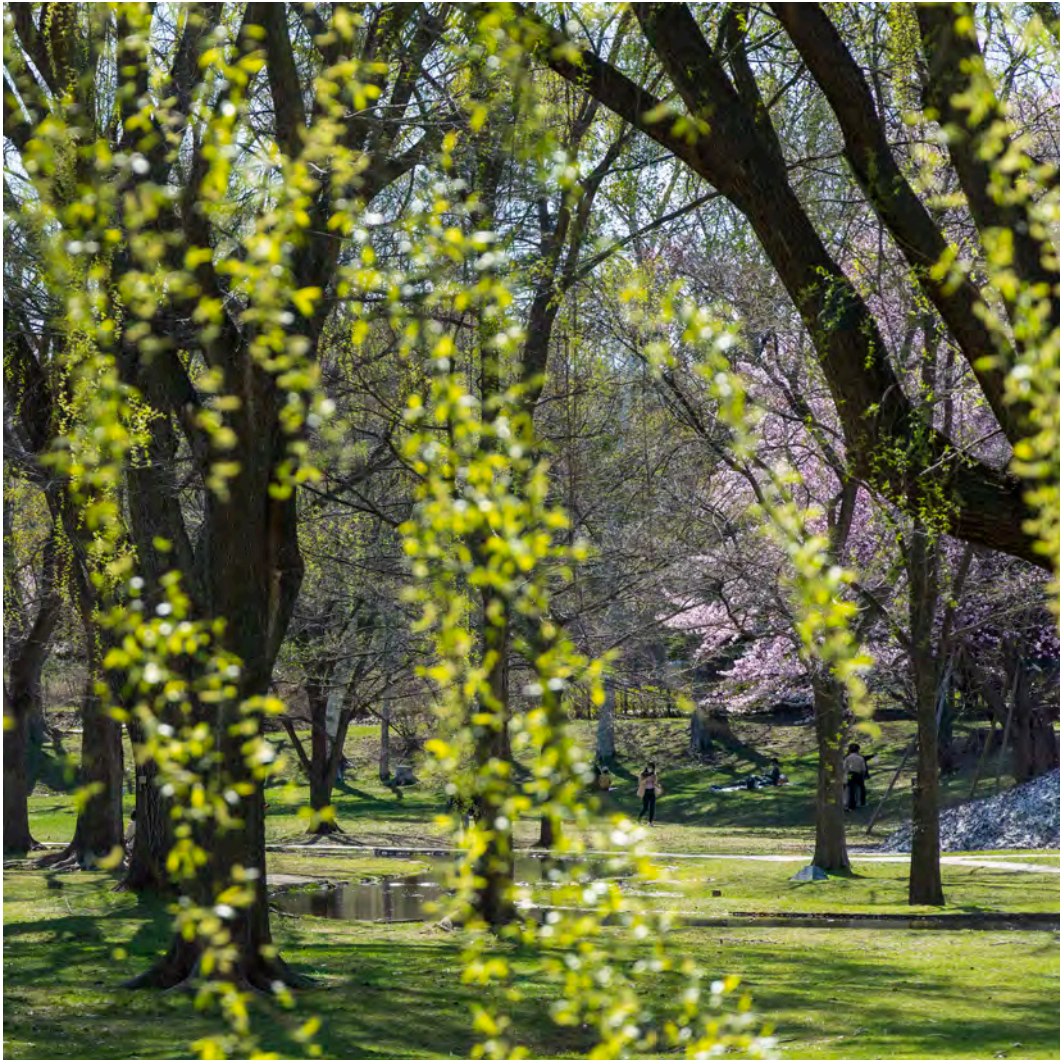
The Dorokawa basin within the Experimental Forest, where valuable peat swamp forests extend



The certificate award ceremony (from left: Mr. Masaru Horikami, councilor of the minister’s secretariat in the Ministry of the Environment; Mr. Nobuyoshi Sugawara, executive director; and Dr. Makoto Kobayashi, associate professor and director of the Uryu Experimental Forest)

The light illuminating the future

Photographer: Hiromi Terashima



a

When thinking of Hokkaido University in spring, what might first come to mind are the lush, verdant trees and cherry blossoms that stretch far and wide. It is a place where new leaves bud, flowers bloom profusely, and an air of vitality fills a space that brims with untapped growth and potential.

New students take their first steps, their hearts filled with a mix of nervousness and anticipation. These young individuals, now holding the key to unlocking the doors of knowledge, will embark on their learning journey on this vast campus, ready to tackle the challenges of their times.

With new hope lighting our way, Hokkaido University continues to forge ahead.

Note: For videos showcasing the natural splendor of the campus in different seasons, please visit the University website.



Videos of
campus views
QR code



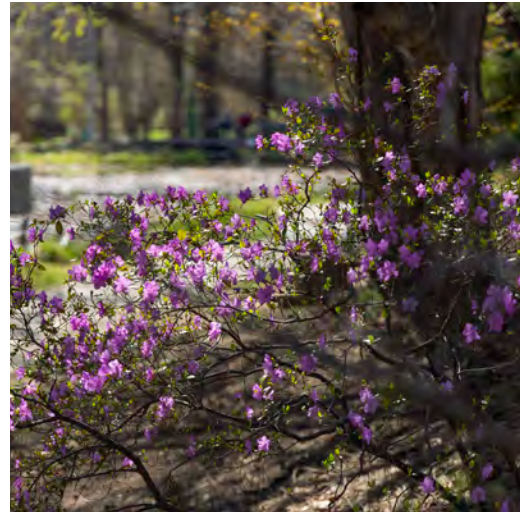
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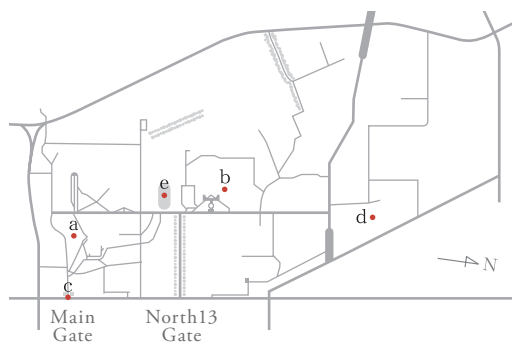
c



d



e



- a. Central Lawn
- b. School of Engineering
- c. Main Gate
- d. Sapporo Agricultural College's Farm No.2
- e. Ono Pond

Hokkaido University's 150th Anniversary

Ambition to enlighten the world

Through this Litterae Populi Magazine, we will introduce the Hokkaido University 150th Anniversary Project. This first installment offers an overview of each program.

150th Anniversary Commemorative projects

Integrated and sustainable promotion of innovation

● Talent Development Project: Innovation Front Runner

To enhance students' curiosity and motivation for further study, Hokkaido University contributes to the integrated and sustainable promotion of innovation by establishing a comprehensive talent development project that spans both undergraduate and graduate education. By leveraging the environment and resources of Hokkaido, the project encompasses co-creation education that connects specialized knowledge with societal challenges, global education centered around Nitobe College, early entrepreneurship education, and more.

● Virtual Campus Project

Symbolic Hokkaido University facilities and buildings that can be utilized for educational and research purposes will be "virtualized." This aims to contribute to co-creation with society and to the sustainable promotion of innovation while conveying the appeal and potential of Hokkaido University domestically and internationally.

● Furukawa Hall Renovation and Utilization Project

We will renovate Furukawa Hall, a nationally registered tangible cultural property, which Hokkaido University preserves as a historic building. The renovation aims to promote the University's activities for the SDGs and for diversity, equity, and inclusion (DEI) to the community. It will also provide a space where young people can come in touch with true knowledge, contributing to the creation of a bright future society.



Promotion of collaboration with society, corporations, and more

● "Children's Book Forest" Project

Hokkaido University will receive a donation of a building's design and construction on the Sapporo Campus from Tadao Ando, the world-renowned architect. In collaboration with the City of Sapporo, the University will create a space where children can access a diverse range of books. This initiative represents part of new social co-creation efforts of the University, contributing to the nurturing of children who will support the next 150 years.

● Communication Enhancement Hub Creation Project

We established the Enlight hub for communication enhancement inside Hokkaido University Open Innovation Hub "ENREISO," a center where researchers and students from the University, as well as individuals from other universities, local governments, and corporations, can freely exchange opinions and create innovative solutions to societal and regional issues. This hub promotes the dissemination of information about the anniversary project and invigorates communication within and outside the University.

Other projects

● Editorial Project for Publications on the 150-Year History of Hokkaido University

To archive the history of Hokkaido University and convey the University's historical charm through publications, this project plans to release volumes offering a general overview, reference materials, photo collections, and booklets.

● Hokkaido University Research Festival Project

In 2026, to commemorate the 150th anniversary, a series of research presentation events focused on sustainability, innovation, and diversity will be held on 150 consecutive days, targeting elementary, junior high, and high school students. A symposium that brings together university researchers, industry professionals, government officials, and the general public will also be convened to reduce the distance between the local community and the world.

The above information is current as of March 2024. Aiming toward 2026, Hokkaido University will continue to plan projects that can contribute to its development over the next 150 years. We appreciate your support.

Scan here for the special website for Hokkaido University's 150th Anniversary

<https://150th.hokudai.ac.jp/en>



Hokkaido University will celebrate its 150th anniversary in 2026.

Between FY 2023 and FY 2026, the Hokkaido University Frontier Foundation welcomes donations for its projects that are designed to look toward the next 150 years. These commemorative projects include the Furukawa Hall Renovation and Utilization Project, whose key concept is “connecting people, time, greenery, dreams, and achievements” to foster a campus environment where diverse talents will create new value in a sustainable manner. The projects also include “Innovation Front Runner,” a talent development project to cultivate the architects of our future society.



Hokkaido University will celebrate its 150th anniversary in 2026. Ever since its founding in 1876 as Sapporo Agricultural College, one of the earliest degree-awarding institutions in Japan, the University has made tremendous strides in its nearly 150-year history. It has contributed to the development of its region and of the world by producing many talented individuals who have played roles not just in the local community, but throughout Japan and beyond.

With the frontier spirit at the heart of its founding ethos and based on all-round education, the University has worked to develop unexplored fields of study, promote societal contribution through practical learning, and foster the development of professionals who can thrive on the world stage. Its history sets the University apart from other universities in Japan. For instance, soon after

it was founded, in the early Meiji era, it began English education provided by faculty members from abroad. In addition, the untold efforts of our predecessors have enabled the institution to develop into a comprehensive research university with one of the largest campuses in the world.

The year 2026 will mark the beginning of the next 150 years, during which we will tap the potential that has been fostered through our 150-year history in an exceptional environment in order to contribute to the resolution of global issues as a unique, unparalleled institution.

We have established the 150th Anniversary Foundation, as we will be implementing commemorative projects for the next 150 years under the slogan “ambition to enlighten the world.” As we endeavor to become an institution that makes positive impacts on society through outstanding research, we sincerely ask for the support not only of our alumni and friends, but also of local residents and businesses.

Kiyohiro HOUKIN
President of Hokkaido University

Request for Donations Hokkaido University's 150th Anniversary Fund

How to Donate

Click “Donate” on the Hokkaido University Frontier Foundation website, select a payment method (credit card, postal/bank transfer, or convenience store payment), and follow the procedure.

With credit card payment, you have the option to make recurring donations (monthly, once a year, or twice a year). Registering as a member at the time of application for donation allows you to change your registration details online at any time.

URL ► <https://www.hokudai.ac.jp/fund/en/>



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