Hiroshima University (University Functions to be Enhanced: 1. Boost academic excellence in specific areas of the university's strength, 2.

Generate innovation that can help solve global issues and advance societal reform, 3. Take a lead in

resolving regional issues through collaboration with regional communities.)

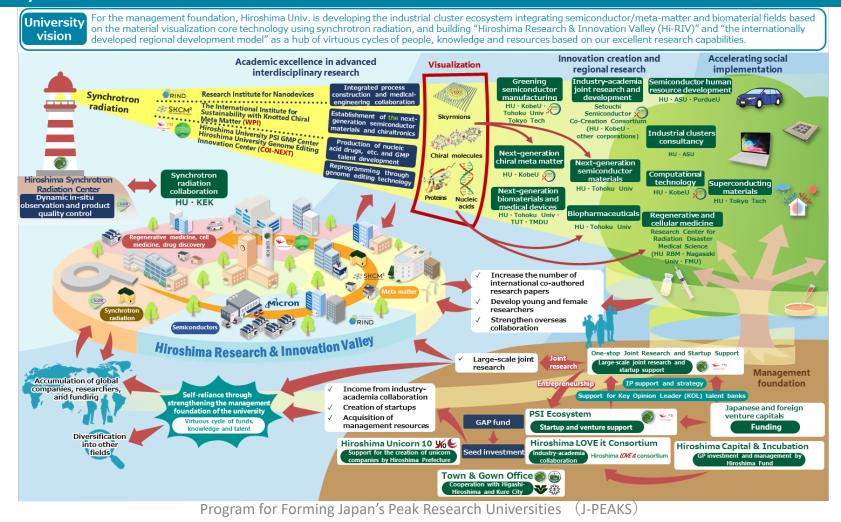
Collaborator: Kobe University

Participators: Tohoku University, Tokyo Medical and Dental University, Tokyo Institute of Technology,

Toyohashi University of Technology, the High Energy Accelerator Research Organization

(KEK), Arizona State University, and Purdue University.

## **Summary**



## **Framework** MOBE UNIVERSITY HIROSHIMA UNIVERSITY **President of HU President of Kobe U** Organization of Research and Academia-**HU-Kobe U executive meeting** Government-Community Collaboration Higashi-Kure city Hiroshima city Executive Vice **Executive Vice President** President (Community Collaboration, **Executive Vice** (Research) Funding, & Alumni Associations) **Executive Vice Executive Director** President **Executive Vice** President (Financial & General Office of Research and (Education & Affairs) (Kasumi Campus, President Peacebuilding) Faculty Personnel & Academia-Government-Community (Global Initiatives) Public relations) Collaboration International **Headquarters for Co-creative Future** University **Headquarters for Open Innovation** Financial & Science Library Office Town&Gown **Education** Medical **General Affair** Office Office **Policy Office** Dept. of Research and Academia-Dept. of Intellectual Dept. of Academia-Dept. of International Office Dept. of Dept. of Research Dept. of Government-Community Strategy Libraries Collaboration Support Collaboration Affair Headquarter of research strategy & Academic · International Patent · Academia- Support of effective resource allocation writing acquisition & cooperation Industry community · Research & young researcher support by URA support intellectual cooperation & cooperation Technical advice, Countermeasure for ELSI asset strategy startup Cooperation **Kobe University** articipants Tohoku University Research Center for Membrane and Cooperation between Next-generation semiconductor materials Film Technology Greening of semiconductor manufactures Waste gas and water sep supporters (University think Development of medical research and instruments semiconductor production **Booster team** Molecular photoscience Research Center tank' Project for Strengthening Regional Core and Tokyo Medical and Distinctive Research Universities (J-PEAKS) Dental University Participants Tokyo Institute of Technology Development of next-generation Significantly advanced The International Institute for biomaterials and clinical application Research Institute for · Greening of products through the Sustainability with Knotted researches Toyohashi University of development of advanced semiconductor devices **Nanodevices Chiral Meta Matter** Participants Technology RIND Integrated process Development of next-generation semiconductor Arizona State Next-generation J⊕イノベ University sensor devices construction Development of semiconductor specialists semiconductor materials Application to biodevices Medical engineering · Establishment of chiraltronics Industrial clusters consultancy elf-reliance through The High Energy (Company) strengthening the Accelerator Research KEK IMSS Hiroshima Synchrotron Radiation center **Purdue University** Participants management foundation Organization · Dynamic in-situ observation using UV-range Japan-USA semiconductor association CHISOR Measurement of next-generation semiconductor Virtuous cycle of 57 synchrotron radiation through UPWARDS for the Future materials using synchrotron radiation funds, knowledge, and talent **Genome Editing PSI GMP Center Innovation Center** PSI Ecosystem Hiroshima LOVE it Consortium **Accelerating** (COI-NEXT) · Production of nucleic acid Gene reprogramming social drugs and vaccines **Hiroshima Capital &** Hiroshima Unicorn 10 through genome editing Innovation creation GMP talent development Incubation (HIC) (Hiroshima Pref.) technology Regional contribution University-wide application of accomplishment Setouchi Semiconductor Co-Creation Consortium (Hiroshima Pref. & Higashi-Hiroshima City) **Graduate School of Humanities and Social Sciences** Graduate School of Advanced Science and Engineering Graduate School of Integrated Sciences for Life **Graduate School of Biomedical and Health Sciences** Graduate School of Innovation and Practice for Smart Society etc. **Cooperation with Japanese and foreign venture capitals**

## **Timeline**

(A. Management section: Light blue; B. Resource section: Yellow; C. Engagement section: Red; Integration section: Pale orange)

| Initiatives                              |  | Stage 1  |  |  | Stage 2   |  |  | Stage 3  |   |          |  |
|--|--|--|--|--|---|--|--|--|---|----------|--|
|  |  | 2023   | 2024   | 2025   | 2026  | 2027   | 2028   |  | 2029 2030   | 2031     | 2032   |
| excellence                               | Core initiative:<br>Strengthening<br>of research<br>capability   | Development of research teams  Development of research facilities  Development of research facilities  Strategic support  Research team fully operational funding  |  |  | Enhancement of collaborative studies and increment of co-authored papers with international collaboratives and corporations based on the network of the three core initiatives:  ①Diversity and excellence, ②Social implementation/Innovation, ③Regional contribution |  |  |  |   |          |  |
|  | Core initiative:<br>Development of<br>young<br>researchers   | Expansion of Setouchi Semiconductor Co-Creation Consortium  Support for doctoral students and cooperation with universities  Enhancement of the Phoenix Postdoctoral Fellowship  Development of young researchers abroad program  Recruitment of young researchers             |  | Promotion of Setouchi Semiconductor Co-Creation Consortium ecosystem  Enhancement of development, recruitment and retention of doctoral students and young researchers |   |  |  | Consortium  Developmendoctoral stu young resea | Realiz  |          |  |
|  | Support<br>strategy to the<br>whole<br>university  | Enhancement of priority Employment of postdoo  | Enhancement of priority rental of flexible utilized spaces  ployment of postdoctoral researchers to increase research productivity  coduction of research support for ELSI  poport of researchers by the writing center  Enhancement of priority rental of flexible utilized spaces  Employment of postdoctoral researchers to increase research productivity  Continuous support for ELSI  Support provided by writing center through journal editors |  |   |  |  | Self-reliand                                   | Writing sup   | port     | ation of the Hiro  |
| ②Social<br>implementation/<br>Innovation | System<br>development<br>for researches<br>Research<br>strategy for<br>external  |  |  |  | Promotion of start-up creation and acquisition of management resources  Strengthening of intellectual property strategy boration and fund-raising (including private grants)  |  |  | ce through the university                      | <ul> <li>Entrepreneur</li> <li>Social implementation/<br/>Young talent<br/>development</li> <li>Start-up</li> <li>Booster team</li> </ul> |          | Realization of the Hiroshima University vision of research power enhancement |
| ③Regional contribution                   | funding<br>Industrial<br>clustering for<br>implementation  | Development of indust  | operational rial affiliation program (Hird miconductor and superconductor  |  | Industrial clustering of Setouchi  Broad extension of Tow   | i Semiconductor Co-Creation Const            | ortium companies   | ersity-wide dis                                | Industrial af<br>program<br>Industrial cli<br>Town & Gov  | ustering | ion of researc   |
| (Kesearch support                        | Strategies for<br>development,<br>recruitment<br>and retention<br>of support staff<br>University-wide<br>research<br>promotion | Ensuring sufficient support staff  Quality increment of support staff by employing assistants  Improve retention of support staff by introducing incentives  Mutual exchange of support staff with the partner and participants  Strengthening the IP mindset of support staff |  |  | Strengthening the development, recruitment, and retention of support staff  |  |  | ssemination                                    | Quality increment of support staff  Continuity of support  Deepening of IP strategy   |          |  |
|  |  | Development of research environments that exploit integrated knowledge  Organization of research exchange  |  |  | Promotion of integrated knowledge utilization  Development of domestic and international research exchange  |  |  | ut<br>kr                                       | esearch promotion by<br>ilizing integrated<br>nowledge & research<br>ichange  |          | ment   |
| ⑤Management<br>(Managerial<br>ability)   | Strengthening<br>managerial<br>power for the<br>university<br>vision   | Online international rec   | ruitinent  | Surveillance of patents,<br>marketability, research<br>capabilities, etc.  |   | marl<br>capa<br>of research outcomes with Ko | eillance of patents,<br>cetability, research<br>bilities, etc. |  | ealization of bo  |          |  |