

IV. Integrated Research Project Members and Major Job Descriptions:

1. Integrated Research Project Team:

Member	Name	Affiliated Institution/Department	Title	Major Job Descriptions in the project
Principal Investigator				
Co-Investigator 1				
Co-Investigator 2				
Co-Investigator 3				
Co-Investigator 4				
Co-Investigator 5				
⋮				

2. Major Descriptions of the Integrated Research Project:

Please elaborate on the following points:

- (1) Necessity of Integration: Including the overall objectives, the framework for collaboration and division of work, and the relevance and level of integration between the principal investigator and co-investigators.
- (2) Human Resource Coordination: Including the principal investigator's leadership, the professional capabilities of the co-investigators, and their ability of cooperation and coordination.
- (3) Resource Integration: Including the sharing of instruments and equipment needed by the principal investigator and co-investigators, as well as the exchange of relevant research experiences and outcomes.
- (4) Coordination with the applicant organization or other units.
- (5) Expected synergistic effect.

Diversity, Equity, and Inclusion (DEI) Checklist

Categories	Item	Results
Diversity	1. Research topics and anticipated outcomes suitable for diverse groups.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	2. Restricting research methods and designs to a specific group can apply the findings to all groups.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Equity	3. Data collection and analysis process is not influenced by biases from personal value judgments.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	4. Monitor and reduce biases to ensure they do not affect the participation of research team members.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Inclusion	5. Prepare appropriate language versions, assistive equipment, or applicable support measures to specific groups.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	6. Consider which groups may have significant impacts (positive or negative) as results of research finding.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	7. Neutral language or objective descriptions are used in research data records and reports.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Implementation Plan	8. Establish a mechanism to monitor DEI implementation regularly.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	9. Establish a mechanism to improve DEI outcomes.	<input type="checkbox"/> Yes <input type="checkbox"/> No

For items with a "No" check result, please provide supplementary explanations on how to meet the criteria:

Principal Investigator's Signature/Date

III. Research Proposal Content (in Chinese or English):

(Content should be no more than 30 pages, including up to 5 pages of references)

Please use "DFKai-SB" font for Chinese text and use Times New Roman, Arial, or Calibri font for English text. The font size should not be smaller than 12, and line spacing should be "single spacing". Margins (top, bottom, left, and right) should be no less than 2 cm. If there are key images in this research proposal, the resolution should be no less than 300 dpi.

1. **Background of the Research Proposal.** Please provide a detailed description of the disease to be studied or addressed by this research proposal, including its originality, importance, anticipated impact, and the current status of related research both domestically and internationally. Additionally, describe the novelty, competitive advantages, key supporting evidence, and review of important references.
2. If a medical center that previously participated in the "Build up a big biomedical database for translational research" project intends to use the original cancer type for the current "Value-added Biomedical Data for Disease-oriented Applications" (new recruitment) project, it must clearly specify the differences between the original project and the current proposal and articulate the clinical and research value of the newly recruited cases.
3. **Specific Objectives**
4. **Preliminary Research Achievements.**
5. **Research Methods, Process, and Implementation Schedule**
 - (1) **Database:**

The types of diseases intended for dataset build-up, data quality, scope, scale, and completeness. Specify whether the data conforms to known international standard formats, whether it is structured medical data, and if there are mechanisms for ensuring data correctness during collection, including analysis and validation. Clinical data shall include "genetic data," "medical imaging," "digital pathology," and "structured electronic medical records." Each year, data for at least 80 patients with a specific disease must be constructed, and follow-up data for cases uploaded in the previous year should be updated in the following year.
 - (2) The project must provide a detailed description of how biomedical data will be structured and how quality control will be implemented.
 - (3) Planning and approach to manage the collected biomedical data into the hospital's Human Biobank, commitments for subsequent data sharing mechanisms, as well as planning approaches from technical or regulatory aspects, etc.
 - (4) Standards and planning for patient recruitment. Recruited patients must sign (1) the IRB informed consent form designed for this project, and (2) the informed consent form of hospital's Human Biobank.
 - (5) Planning and methods for regular data upload to the National Center for High-Performance Computing.
 - (6) Requirements and planning for data security and personal data protection by the applicant

Value-added biomedical data to disease-oriented applications

organization

- (a) Planning for data security firewalls (including file management and personnel operations).
- (b) Considering the practical operations of each applicant organization, it is recommended that the applicant organization provide supporting documentation or certification for planned de-identification techniques, including but not limited to ISO 29100/29191, CNS29100-2, or ISO 20889.

(7) Anticipated challenges and the corresponding solutions.

6. Expected Tasks and Outcomes.

(1) Please List by Year:

The number of new cases uploaded each year, the planning for case follow-ups in the following year, including the project's phased milestones and endpoints by year.

Table: Phased Milestones and Endpoints

Year	Phased Milestone	Checkpoint	Endpoints
114			
115			
116			
117			

Note: Phased milestones and final endpoints should be specific and achievable outcomes that can be evaluated with quantifiable indicators or specifications

(2) Planning for promoting practical clinical applications.

(3) Other anticipated impacts or contributions in terms of academic research, clinical applications, and social influence.

7. If there are similar with ongoing or proposed projects (including those with NSTC and other institutions), please explain whether they overlap and their relevance.