Guidance on Priority Areas for the Alberta Innovates Postdoctoral Fellowship Program (2025/26 – 2027/28)

1. Lab to Market/Impact: advancing health research and technologies with high potential for commercial success and/or real-world impact.

Key considerations (**at least one** should apply):

- **Intellectual Property Development:** Does the project foster the creation, refinement, or protection of key intellectual property—whether through patent filings, licensing plans, or other mechanisms—that could enhance the likelihood of successful commercialization?
- **Proof of Concept & Prototype:** Is there a well-defined plan for moving foundational insights beyond theory—through iterative experimentation or pilot-scale implementation—to lay the groundwork for a proof of concept or demonstrable prototype?
- **Progress Along the Health Innovation Pathway:** Does the project involve any activity in steps 2 through 8 on Alberta Innovates' health innovation checklist?
- **Accelerated Development Methods**: Does the project use computational or other advanced methods (e.g., in silico drug screening, AI-driven design, simulation models) to reduce traditional development costs and timelines, speeding the path from discovery to application?

2. Clinical Research: engagement in clinical research activities, including study design, participant recruitment, data collection and analysis, or integrating research directly into care.

Key considerations (**at least one** should apply):

- **Clinical Setting or Participants**: Does the project directly involve human participants or patient-care settings—such as hospitals, clinics, or community health environments?
- **Clinically Relevant Data or Samples:** Does the project involve the use of clinically derived data, biospecimens, or registries (e.g., biobanks, patient databases) to advance more precise treatments, diagnostics, or care approaches?
- **Safe & Compliant Conduct**: Is there a plan to address the ethical and regulatory measures required for clinical studies involving direct patient interaction or sensitive health information?
- **Capacity Building in Alberta**: Does the project contribute to strengthening Alberta's clinical research ecosystem (e.g., developing clinical trial expertise)?

3. Innovative Care Model Implementations: collaborating with healthcare providers to pilot and scale new care models that improve patient outcomes and system efficiency.

Key considerations (**at least one** should apply):

- **Intervention Testing:** Does the project involve testing an intervention or change in how care is delivered, aiming to enhance health outcomes or increase system efficiency?
- **Addressing Priority Challenges:** Does the proposed intervention directly tackle a recognized health system challenge or performance gap (e.g., major disease burden, resource bottlenecks, or service inefficiencies) identified by Alberta's stakeholders (e.g., patients, care providers)?
- **Monitoring & Evaluation:** Is there a clear plan to track intervention fidelity and key performance indicators (e.g., adherence to protocols, timeline milestones) to assess how effectively the new model is being implemented?
- **Collaboration & Knowledge Sharing:** Are healthcare providers, decision-makers, and/or patients meaningfully involved in co-developing, evaluating, and refining the intervention?

4. Building Healthier Futures Through Cross-Disciplinary Collaboration: leveraging cross-disciplinary frameworks to advance more integrated and comprehensive solutions to health promotion.

Key considerations (**at least two** should apply, including a mandatory human health component):

- **Human Health Component (Mandatory):** Is there a demonstrable plan to benefit human health—whether through preventing disease, enhancing care, or informing health policy? *Example:* Integrating knowledge from human medicine, veterinary science, and ecology to address complex challenges (e.g., antibiotic resistance or vector-borne disease), ensuring that any proposed solution includes safeguards for human health (not just animal and/or environmental).
- **Potential for Greater Impact:** Is there evidence that combining these disciplines can yield outcomes or insights that are more innovative, robust, or wide-reaching than single-discipline approaches?
- **Relevance and Justification of Disciplines:** Does the proposal offer a clear and convincing explanation of why the specific disciplines selected are essential?
- **Demonstration of Cross-disciplinary Collaboration (through any of the following):**
    - **Supervisory/Team Support**: Supervisors or collaborators from different fields that will jointly guide the fellow's project, expanding its relevance beyond a single discipline.
    - **Fellow's Own Trajectory**: Transitioning from one field to another (e.g., a PhD in engineering to postdoc in epidemiology), enabling integration of knowledge that is typically siloed.
    - **Ecosystem Engagement**: Meaningful collaboration or knowledge exchange with multiple stakeholders (e.g., industry, policy, community), indicating a broader, cross-sector influence on the project.