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# Unique Adenoviral Vector-Based Universal Influenza Vaccine

**Bovine adenovirus vector vaccine induces broad humoral and mucosal immunity as a universal flu vaccine.**

Current seasonal influenza vaccines offer strain-specific protection and, thus, are less effective against mismatched strains. A universal influenza vaccine is necessary to provide comprehensive protection against a wide range of influenza viruses for seasonal and pandemic influenza preparedness. Researchers at Purdue University have developed a bovine adenoviral (BAd) vector-based universal influenza vaccine. The vaccine induces robust humoral and cellular immune responses in mice with a single intranasal inoculation. This technology provides an option to stockpile the influenza vaccine without the concern about its effectiveness due to strain variants. It also allows stockpiling of influenza vaccine for pandemic preparedness. The vaccine will prevent influenza-associated illnesses and deaths unlike several other type of strategies that have been used to develop a universal influenza vaccine.

**Technology Validation:**

Immunized mice conferred protection against a broad panel of heterosubtypic influenza A and B viruses with the absence of morbidity and mortality and significant reductions in lung viral titers.

**Advantages**:

-Unique vaccine platform

-Novel antigen design

-Mucosal route of vaccine delivery.

**Applications**:

-Influenza vaccine

-Flu vaccine

**Technology ID**

2025-MITT-70855

**Category**

Biotechnology & Life Sciences/Cell & Gene Therapy Platforms

Pharmaceuticals/Drug Discovery & Development

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-Vaccine development

**TRL:** Pharmaceuticals

**Intellectual Property:**

Provisional-Gov. Funding, 2024-11-04, United States

**Keywords:** Flu, Influenza, Medical/Health, Pharmaceuticals, Universal, Vaccine, Vector-based