

College of Natural Resources and the Environment

University of Massachusetts Amherst

Competitive Agricultural Systems in a Global Economy

Genetic Improvement of Dairy Cattle Using Molecular Markers

Issue

Genetic mechanisms determining persistency of lactation are poorly understood. What has been done? These experiments have identified p19-arf, MDM-2 and Stat3 as molecular partners that interact with p53 to regulate apoptosis in response to acute interruptions in milk removal in mice.

Impact

Identifying naturally occurring polymorphisms in these genes in livestock could be exploited as a molecular method for selection of individuals for milk production.

Primary impact area(s)

- Research

- Education
- Extension

Funding sources

- Hatch Act

Topics

- Biotechnology

Contacts

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