# Animal Nutrition and Environment Modeling Laboratory (ANEMAL)

**UC DAVIS**
UNIVERSITY OF CALIFORNIA

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| **Job Title:** | **Post-doctoral fellow in Developing Nutrient Requirements Model for Tropical Dairy Cattle** |
| **Position Type :** | Full-time, 3 years (with strong possibility of extension) |

**Job Description:** Development of nutrient requirement models for tropical dairy cattle

**Project Summary:**

Emissions from cattle is one of the major contributors to global anthropogenic methane ($CH_4$) emissions. The Strategies to mitigate methane include absolute (unit methane/day) or relative/intensity based (methane/unit of product). In low and middle income countries, one of the best way to reduce impact of dairy cattle on the environment is to improve productivity, thereby, reduce emission intensity. One of the ways to increase productivity is by matching animal requirement with available feed sources. However, most of the requirement models are based on western breeds such as Holstein and Jersey. There is a need to build nutrient requirement models specifically for tropical cattle. The post-doctoral fellow will be part of an international consortium that will be carrying out experiments in South and Southeast Asia, and Africa. Working with computer scientists, the final goal is to develop a ration formulation software for tropical cattle in local languages integrating feed resources available in each region.

**Main duties and responsibilities:**
The main responsibilities and duties to be undertaken will be:
- Developing mathematical models of nutrient requirements;
- Utilize data from the literature as well as primary data;
- Coordinating with partners to help generate data from around the world;
- Dissemination of results through peer-reviewed publications, project reports and conference presentations;
- Other duties as defined by the principal investigator.

**Skills/Qualifications:**

Ruminant nutrition, Experience in developing mathematical models is highly desirable, Capable of conducting unsupervised work, and Initiative.

**For more information or to submit an application (completed resume and cover letter) contact:**

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