Budget Justification

Key Personnel:

XX (PI): Dr. XX will devote 3 calendar months effort to this project. In addition to attending a group lab meeting each week she will meet with each of the post-doctoral fellows and research assistants on a daily basis to review progress in the form of primary data and to interpret data and plan ongoing experiments. She will also assist in the interpretation of data. She will use her experience to oversee the design of experiments which are new to the lab. She will be the primary person involved in outlining and preparing manuscripts and any other reports related to the grant. The fringe benefit rate for Dr. XX is XX% and her salary is expected to increase 3% annually.

XX (PI): Dr. XX will devote 1.2 calendar months effort to this project. Dr. XX will meet with the post-doctoral fellows, research assistants and Dr. XX on a weekly basis in a two hour lab meeting which will be used to review data of the previous week. He will meet with Dr. XX several times a week to discuss overall progress and to assist in the interpretation of data and planning of ongoing experiments. He will work with Dr. XX on preparing and editing manuscripts. Salary support is not requested for Dr. XX.

Other Personnel:

Research Fellow (Adam Smith): This individual will be responsible for the experiments in specific aims 1 and 2. He is a post-doctoral fellow in the lab who was first author on the recent publication on XX and has the necessary skills to effectively pursue these aims. He will be responsible for making the constructs for the two proposed genetically modified mice. XX has six years of experience as a post-doc fellow and would be at year seven at the start of this grant. His salary is NIH NRSA recommended level seven and thus should begin at \$XX.

Research Fellow (Roberta Jones): This individual will be responsible for the work in specific aim 3 and 4. In addition he will be responsible for supervising a research assistant on colony maintenance. He is a postdoctoral fellow in the lab and has generated preliminary data used in these aims. XX is beginning his second year as a post-doc (NIH Year 1). His salary is NIH NRSA recommended tobegin at \$XX however Boston has an extremely high cost of living, subsequently we would pay him a year three salary of \$XX.

Research Assistant (Jane Marks): This individual will be responsible for maintaining the in house animal colonies. A critical aspect of this work is timely genotyping. In addition he will assist Drs. XX and XX in experiments involving XX studies. He will perform XX. He will also be primarily responsible for performing XX studies on the animals. At the time of sacrifice of animals he will assist the post-docs in collecting and banking tissues.

<u>Research Assistant (To be named)</u>: This individual will be responsible for assisting the post-docs with XX. He or she will also assist as needed in XX. He or she will serve as a XX and XX in addition to also assisting in XX studies.

The fringe benefit rate for the Other Personnel is 26.6% and the Other Personnel salaries are expected to increase 3% annually.

Equipment: We are requesting \$XX in the first year to buy a XX which we use for our XX. Although we have XX in the lab both are quite old models with slow turn-around times and we are also concerned about irreparable breakdown. A new XX would improve XX and would be usable for the duration of the grant.

Materials and Supplies:

We are requesting an average of \$XX each year for animal purchase and care expenses, as well as consumable lab supplies:

Animal Housing Costs: If needed: cage costs in the XYZ facility are \$1.32 per day. We will need on average a cage census of 20 over the course of the year which will total \$9,636 per year.

Animal purchase costs: if needed: DEF strain animals which be used in Aims 1 and 3 will be purchased from Jackson laboratories. The price per animal is \$EE.FF. The total cost of purchased animals per year will be \$GG.HH.

<u>General Lab Supplies</u>: We have requested an average of \$XX dollars in general lab supplies each month. This is calculated on the basis of current expenses involving similar studies. The classes of lab supplies that this will cover includes, XX. Also included are XX. Also included are XX. Also included are XX are also included. Also included are XX and non-capital consumable supplies and materials.

Travel: The travel is to cover attendance of the two PIs and the two post-doctoral fellows to a XX and to the XX meeting. Typically the PIs attend these meeting yearly. Attendance of the post-docs will be in part dependent on submission of abstracts to the meetings. Both meetings are national meetings that are key to the area of research covered in this grant. We are requesting \$1,500 per individual per meeting for domestic travel expenses.

Radioactivity and Radiation Monitoring: This includes the cost of radioactive compounds for studies of XX. We are requesting \$XX per year to cover the costs of radioactive substances and all safety monitoring expenses.

Publication Costs: We expect to publish an average of three peer reviewed manuscripts yearly. At present all journals have both submission and publication costs. We are requesting \$1,500 per publication per year.

Core Facility Services: This includes cost for:

- 1. XX: As described in Aim 1, we will be generating X samples of Tissue 1 to be analyzed by the BIDMC genomics core using ABC Affymetrix Chips. The cost of this analysis is \$\$\$ per chip.
- 2. XX (Y samples to be analyzed by the BIDMC Proteomics core)
- 3. XX (Z samples generated in Aim 2 will be analyzed by Metabolomics core at Yale University at a charge of \$\$\$ per sample.