To initiate doctoral research, a PhD student must present a written prospectus to the dissertation committee that “describes the scope of the problem, the materials or subjects used, method and design of the study, and projected results,” (see [http://gradschool.wayne.edu/phd-info/da-committee.php](http://gradschool.wayne.edu/phd-info/da-committee.php)). For Cancer Biology students, the written prospectus will be prepared in the format of an abbreviated F31 fellowship application, as described in further detail here.

### Basic Elements of a Fellowship Application

#### Project Summary/Abstract
The Project Summary must contain a summary of the proposed research and be a self-contained description of the project. The summary should contain a statement of objectives and methods to be employed. It should be informative to other persons working in the same or related fields and insofar as possible understandable to a scientifically or technically literate lay reader. State the application’s broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Describe concisely the research training program design and methods for achieving the stated goals.

#### Specific Aims
State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved. List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology. This section should be no longer than 1 page single spaced, 2 pages doubled spaced.

#### Research Strategy
Organize the Research Strategy in the specified order using the instructions provided below. Start each section with the appropriate section heading—Significance, Approach, etc. Discuss the preliminary studies, data and/or experience pertinent to this application. Cite published experimental details in the Research Strategy section and provide the full reference in the Bibliography section. Research Strategy is limited to six pages single spaced, 12 pages double spaced (not including Bibliography). Detailed descriptions of the subsections under Research Strategy are as follows:

(a) **Significance**
- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
- Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
- Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

(b) **Approach**
- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted.
- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high risk aspects of the proposed work.
- Include any courses that you plan to take to support the research training experience

If the application has multiple Specific Aims, then you may address Significance, Innovation and Approach for each Specific Aim individually, or may address Significance, Innovation and Approach for all of the Specific Aims collectively. Include information on preliminary studies, if any. Discuss the preliminary studies, data and/or experience pertinent to the proposed study.
Goals for training and career
Describe overall career goals, and explain how the proposed research training will enable the attainment of these goals. Identify the skills, theories, conceptual approaches, etc. to be learned or enhanced during the award. (One page, single spaced; two pages, double spaced)

Activities planned during training
Describe by year the activities (research, coursework, etc.) you will be involved in during your training and estimate the percentage of time to be devoted to each activity, based on a normal working day. The percentage should total 100 for each year. Also, briefly explain activities other than research and relate them to the proposed research training. (One page, single spaced; two pages, double spaced)