

# Grant at a Glimpse: Grant Planning Matrix



*Below are 6 sets of information you will need to write an application.*

Problem (or gap in knowledge) that your grant application will solve (fill) = \_\_\_\_\_

Bigger Problem (or gap in knowledge) in your field that your work will contribute to solving (filling) = \_\_\_\_\_

## **Info. Set # 1 – Sketch out the preliminary data you have (or need) for each Aim**

Sketch your preliminary data – either what you have, or what you will need. What does the data show? What remains unknown?

|   | Preliminary data relevant to all Aims |
|---|---------------------------------------|
| Sketch it here >                            |                                       |
| What it shows.<br><br>What remains unknown? |                                       |

| Preliminary data relevant to, or primarily relevant to, just one Aim |        |        |        |
|--|--------|--------|--------|
|  | Aim 1: | Aim 2: | Aim 3: |
| PD1.<br>Sketch it here >   |        |        |        |
| What it shows.<br><br>What remains unknown?                          |        |        |        |
| PD2<br>Sketch it here >  |        |        |        |
| What it shows.<br><br>What remains unknown?                          |        |        |        |

|  |  |  |  |
|--|--|--|--|
| PD3<br>Sketch it<br>here >                           |  |  |  |
| What it<br>shows.<br><br>What<br>remains<br>unknown? |  |  |  |

## Info. Set # 2 – Write Specific Aims, hypothesis each will test, and sub-aims for each Aim

Note: it can be helpful to write your sub-aims as questions (Q).

|           | <b>Aim 1:</b>   | <b>Aim 2:</b>                      | <b>Aim 3:</b>                      |
|-----------|---|------------------------------------|------------------------------------|
|           | <b>Why are you doing this aim?</b>  | <b>Why are you doing this aim?</b> | <b>Why are you doing this aim?</b> |
|           | <b>Hypothesis for Aim 1:</b>  | <b>Hypothesis for Aim 2:</b>       | <b>Hypothesis for Aim 3:</b>       |
| <b>Q1</b> | Aims can often be broken into smaller tasks, sometimes called 'sub-aims'. Write those here* |                                    |                                    |
| <b>Q2</b> |   |                                    |                                    |
| <b>Q3</b> |   |                                    |                                    |

\* I'm suggesting that you state your sub-aims as *questions*. After you write your questions, make sure that answering them will test your hypothesis for that Aim. If the research is not hypothesis-driven, summarize the theory (your work and that of others) that supports the Aim.

**Info. Set # 3 – State the direct output of each experiment and/or sub-aim.**

The direct output is that thing you get from performing an experiment. (e.g., % of cells expressing a marker). Write those outputs in each box.

If a sub-aim contains more than 1 experiment, write the direct output of each experiment in the box.

|           | <b>Aim 1</b>  | <b>Aim 2</b>   | <b>Aim 3</b>   |
|-----------|---|--|--|
| <b>Q1</b> |   |  |  |
| <b>Q2</b> |   |  |  |
| <b>Q3</b> |   |  |  |
|           | <p><b>For Aim 1 in its entirety –</b><br/>What is the <b>direct output*</b> of the aim?</p> <p>What are the near-term <b>benefits to science**</b> of accomplishing this Aim?</p> | <p><b>For Aim 2 in its entirety –</b><br/>What is the <b>direct output</b> of the aim?</p> <p>What are the near-term <b>benefits to science</b> of accomplishing this Aim?</p> | <p><b>For Aim 3 in its entirety –</b><br/>What is the <b>direct output</b> of the aim?</p> <p>What are the near-term <b>benefits to science</b> of accomplishing this Aim?</p> |

## Info. Set # 4 – Determine which experiments you will do to answer each sub-aim / question (Q)

You may have one or more experiments (E) per sub-aim.

|           | <b>Aim 1</b>   | <b>Aim 2</b>           | <b>Aim 3</b>           |
|-----------|--|------------------------|------------------------|
| <b>Q1</b> | Experiment 1 -describe it briefly: include technique and what you will compare to what, what data will you generate?<br><br>E2<br><br>E3 | E1<br><br>E2<br><br>E3 | E1<br><br>E2<br><br>E3 |
| <b>Q2</b> | E1<br><br>E2<br><br>E3   | E1<br><br>E2<br><br>E3 | E1<br><br>E2<br><br>E3 |
| <b>Q3</b> | E1<br><br>E2<br><br>E3   | E1<br><br>E2<br><br>E3 | E1<br><br>E2<br><br>E3 |

### Info. Set # 5 – Sketch out the expected outcome from each sub-aim.

Draw a picture of the data you expect to publish upon completion of each sub-aim. Even if you don't know if a thing will increase or decrease, or what might associate with what, make a guess and draw that figure. The clearer you are about what correlations you are looking for, the clearer your grant will be and the more focused your experiments. If an experiment involves multiple groups and multiple measures, make a table of expected outcomes for each combination.

|           | <b>Aim 1:</b> | <b>Aim 2:</b> | <b>Aim 3:</b> |
|-----------|---------------|---------------|---------------|
| <b>Q1</b> |               |               |               |
| <b>Q2</b> |               |               |               |
| <b>Q3</b> |               |               |               |

## Info. Set # 6 – State the value and potential of accomplishing the proposed work

For all aims combined, what is the **value** of this work?

The “value” is the medium-term outcome that your work will help enable; it probably related to your funder’s priorities; it is probably a central challenge/problem in your field that lots of people want solved; it is probably a *likely*, future consequence of your work.

For all aims combined, what is the **potential** of this work?

The “potential” is a long-term goal that your work with contribute to making possible; It is probably a stated, long-term goal of your funder; it is probably a hopeful but not immediately likely, future consequence of your work.