Notes on Research Proposals:

In research, the crucial thing is to ask good questions. This is easier said than done. Surprisingly, many intelligent & successful undergraduate students find it almost impossible to frame good research questions when they start their postgraduate career.

What are the characteristics of a good research question?

- It relates to what is already known in the existing literature. (Doesn't just appear from "deep space"!)
- There are feasible ways of getting an "empirical" or "objective" answer to it.
- The answer to it makes a difference to our worldview or practice.
- The answer reduces humankind's area of ignorance; i.e., it isn't well known already.
- It doesn't matter which answer we get after doing the research, as long as there is a clear answer yes or no -- or from a finite list. (E.g. it doesn't matter whether algorithm A or algorithm B is more efficient for task C, just as long as it is clear which one is more efficient; likewise, it doesn't matter whether formula X or formula Y is more accurate at predicting variable Z, just as long as we know which is more accurate; et cetera.)

So, are there any techniques which help us to find/create good research questions? Well, one way of organizing our thoughts when we are trying to generate a research proposal (the centrepiece of which will be one or more research questions) is to use the

SPQR+ROMA

framework as a guide. This tends to give us "fruitful soil" from which good questions can grow. (Adapted from Edge & Wharton (2001) -- with apologies!)

Situation	This is the area within which I will be working. (Academic territory.)
Problem	This is an aspect of the situation which is problematic.
Question(s)	This is a question or questions which arises from the problem situation (to which the current literature does not seem to supply satisfactory answer or answers).
Response+Rationale	This is my response to the problem situation; along with the backing reasons (rationale) why the response seems to make sense.
Outcomes	This is what the research plans to achieve -- what will be different after the data has been gathered & analyzed.
Methodials	Method & Materials: this is the method(ology) of approach and materials needed. (M also stands for Milestones, and Money?! You may need to outline a schedule, & a budget.)
Assessment	This outlines the criteria for evaluating whether the response to the problem situation has been successful. (How will we know that the question(s) has/have been answered?)

If you can supply clear and brief descriptions/explanations (just four or five lines of text) under each of these 7/8 headings, you probably have a well-formed research proposal. Otherwise, more thinking is required. The book by Booth et al. (2003) gives some sound practical guidance on going from a vague interest in a topic area to specific questions and then from specific questions to research problems. See especially chapters 3 and 4.

The 2 crucial messages

Whatever else your proposal does, it must convey 2 crucial messages to its reader(s):

1. I know what I'm talking about. (I belong in this field.)
2. What I plan to do is worthwhile (& feasible).

Getting message 1 across requires plenty of background reading. You have to enter into the literature and get an idea of the controversies being discussed by other researchers. It also requires confidence: you need to feel "yes, I could play a part in this conversation". Misdescribing or misinterpreting what previous scholars have said, or ignoring it, destroys your credibility as a researcher very fast. You have to be accurate in describing the main threads of the existing literature, but you also have to identify loopholes or unresolved issues in it, which require further investigation.

Message 2 is tricky too. You mustn't be outrageously ambitious, but you must believe that you can make a contribution, and you must persuade others that it is a contribution worth making.

Some other questions

Is there enough data available?
Is there enough time to get hold of this data, & to analyze & interpret it?
Do you have a good-looking diagram, and -- most important -- does it make sense to
        outsiders? (Nice diagrams do help; but too often figures are mystificational,
        which is worse than useless.)
Do you know how to do scholarly citation & referencing?!
Would anybody apart from your supervisor, your examiner(s) and perhaps your
        mother ever want to read your thesis -- if so, why?

References

Booth, W.C., Colomb, G.G. & Williams, J.M. (2003). *The craft of research.* Chicago: University of Chicago Press.

Edge, J. & Wharton, S. (2001). Patterns of text in teacher education. In: Mike Scott & Geoff Thompson (eds). *Patterns of text*. Amsterdam: John Benjamins Publishing Co. 255-286.

Endnote

SPQR was the motto of the ancient Roman Republic (later Empire). It stands for Senatus PopulusQue Romanus = the Roman Senate and People.