

# PhD Smart Objectives

The Training and Supervision Plan (TSP) is a 'living' document that should be regularly checked and at least once per year adjusted in your end-ofyear appraisal meeting with your supervisor. A perhaps small but nonthe-less important section of the form are your objectives for the forthcoming year. The more well-thought out your objectives are the better you will be able to structure your PhD. We strongly advise you to define annual SMART objectives. Below is some information regarding SMART

#### **Specific**

The first term stresses the need for a *specific* goal versus a more general one. Translated: the goal is clear and unambiguous, without vagaries and prosaic statements.

Ask the question "What do I want to accomplish?" To publish a paper in Nature in the first 6 months of your PhD may satisfy the other components of the SMART mnemonic but this is far too general. The addition of a subject area/technique e.g. "Analysis of the histone code by proteomics" is one step closer but still insufficient for a *specific* objective. Better "to generate a map of the histone modifications present in malaria



trophozoites using different peptide digestion protocols and sensitive 2D-LC-MS-MS." The more specific the task the easier it will be to answer other questions in the SMART mnemonic.

#### **Measurable**

The second term stresses the need for concrete criteria for *measuring* progress towards the attainment of the goal. The thought behind this is that if a goal is not measurable, it is not possible to know whether you are making *progress* towards successful completion of the goal.

Ask the question "How will I know when I have accomplished the goal?" For example "To design better experiments" isn't measureable. On the contrary "to write 3 Science reviews before December" is measureable even if it may not be realistic. Also bear in mind what level of information is required in order to move onto the next goal in your research?

#### **Achievable**

The third term stresses the importance of goals that are realistic and *achievable*. Stretching your talents (ambition) is one thing but be *realistic* as to your capabilities. Ask yourself



- Do I believe I could do this (even if it's hard)?
- How much time do I have to spend on this goal?

If the task concerns a set of experiments then consider "How will I set about performing the experiments"? What is current state-of-the-art? Do I have the correct knowledge/skills? Do I have access to the right technology? Do I have support from my supervisor? Are there particular



constraints e.g. limited material or first optimization of protocols is required? Do I need additional support to reach these goals?

## **Relevant**

The fourth term stresses the importance of choosing goals that **matter**. Your goal to "memorise the national anthems of 5 european countries before Friday" may be Specific, Measurable, Attainable, and Time-Bound, but lacks Relevance. Goals must be relevant to your project. Occasionally going back the the original project outline is quite useful to do. In this case you'll also find that you have the required support to obtain your goals. Remember your goals are also part of a wider picture, namely your departmental research strategy.



- Does this seem worthwhile? Carefully consider why do I want to do this particular task and how does this task fit into a bigger picture. E.g. Will this result in a figure for my next publication or is this just a 'fishing expedition'? Am I going off qat a tangent to the original line of research work?
- Is this the right time? E.g. is this the most important experiment to do now or are other chapters of your thesis more pressing?

# Time-bound

The fifth term stresses the importance of placing goals within a time frame, giving them a due date. A commitment to a deadline helps focus efforts on completion of the goal on or before the due date. The critical question is 'when?' Think about a (realistic) timeline split-up in phases from the coming week to the coming month and the next 6 months. It may be helpful in your planning to define go/no-go points that will also indicate progress made (attainability). Furthermore, it may be helpful to visualize



your planning using project management software (e.g. MS Project). You can include blocks such as individual research goals, student supervision, courses, conferences, writing paper/thesis.

### Phrasing your smart goals

Use action verbs such as:

- to write
- to recite
- to identify
- to sort
- to complete
- to present
- to solve
- to compare
- to build
- to produce
- to maintain
- to improve

In order to help you develop SMART goals for your Training & Supervision Plan use the worksheet below .