Three things that I learned from the article:

1. I learned about what I should do during the first statistical consultation with a client:

(1) establishing rapport

1. allay a client's apprehension:
    1. exhibiting an accepting,
    2. caring attitude-an attitude that encourages the open exchange of information
2. Ending:
    1. when the consultant says, "Well tell me about your project"
    2. the client says, "The reason I'm here is. . . ."

(2) identifying the research problem

1. the client does most of the talking

   Clarify:
1. What questions does the client want to answer?
2. Why are these questions important?
3. what has the client accomplished thus far'?
1. Find all stakeholders
    1. determine if the person to whom the consultant is talking is the real client and if others are involved in the research
    2. Obtain an accurate and relatively complete understanding of the project:

    How does it fit into the knowledge base of a discipline?

    Are there well-established research traditions in the discipline that should be followed?

    Tips: send the client a written summary of my understanding of the project and the agreed-upon course of action. For less complex projects, a verbal summary may suffice.

   Overall, learn about the research problem, the client's expectations, research environment, time and money constraints, and statistical sophistication

(3) setting goals

1. Time & Action:

   when the client's conversation no longer contains relevant new information about the research project and the consultant's questions indicate a good understanding of the project, determine the questions that are to be answered and the actions that are to be taken.
1. Client Word:

   Client: "Yes, that is what I want to know" and "I see, this test will tell me if the two variables are independent."
1. Data:
    1. Haven't collected yet:

    talk about sampling strategies, randomization, threats to internal and external validity, informed consent, and ethical issues
1. Collected:

    determine the conditions under which the data were collected and whether the client controls the use of the data
1. For complex project:
    1. visiting the site where the data will be collected or seeing a dry run can be helpful.

2. If the research involves an unfamiliar area, ask the client for reprints of related research and the names of colleagues with whom the project can be discussed.

(4) agreeing on a division of responsibility

The client and consultant need to discuss openly their expectations about what each will do, when it will be done, and how much it will cost, and, of course, reach an agreement. For example, is the consultant expected to write a preliminary draft of the results? What about joint authorship? These kinds of details need to be spelled out

(5) reviewing what has occurred

the consultant has one more opportunity to ask, "Is there anything else I should know about the project?"

2. I learned about the five roles that consultant will play:

Helper

a. In this role, the consultant acts as a technician and responds to the client's questions and directions. Typically, the client needs one or more specific items of information.

"would it be better to run a t test or a Mann-Whitney U test?"

or the client needs to have a particular analysis performed.

The consultant's job is to supply the information or run the analysis.

b. not a very satisfying role from the consultant's perspective

1. Feedback about the outcome of a consultation is less likely to occur in a helper role than in the collaborator and teacher roles
2. it can lead to bad consulting if clients ask the wrong questions or omit important details concerning the data.

Leader

1. assume responsibility for making sense out of the client's data
2. Pitfalls:
    1. the client has difficulty articulating his or her research questions.

Such clients usually prefer to dwell on the quantity of data that has been collected. "With so much data, surely there must be something here."

Truth: Data that have been collected without clear questions in mind rarely answer interesting questions.

working in an area of science in which we have little or no expertise

Since the client will typically know much more about the data than the statistician, a better, more insightful, analysis will be possible if the client is actively involved.

Disappointment is often one of the consequences of failing to spell out the details of a consulting relationship.

data-blesser

A strongly worded policy statement requiring written approval of all credit lines.

Collaborator

In the ideal case, the consultant is involved in the research from its inception and continues the involvement through the report-writing stage.

Teacher

the client learns about the kinds of things that consultants consider important: identification of the independent and dependent variables and possible confounding variables, random assignment, estimation of sample size and power, and so on.

3. I have learned about the negotiation principles:
    a. The most important negotiating principle is to try to understand the underlying concerns that motivate a client's behavior and then deal with the concerns rather than the behavior.
    a. A consultant should avoid attacking a client's position; instead, let the client know that his or her position is understood-understanding does not imply agreement.
    b. Clients have multiple interests; develop a climate for agreement by first focusing on shared interests and then turn to interests that are opposed.
    c. Clients are more likely to accept the role suggested by a consultant if it seems the right thing to do-right in terms of being fair, reasonable, or honorable.
    d. Clients are more likely to accept a suggestion if there is a precedent for the suggestion. A precedent is both an objective standard and a persuasive argument. The use of a precedent conveys a desire to be fair.
    e. When there is a disparity between the client and consultant in power or prestige and the difference favors the client, the consultant should try to negotiate on the basis of principle.

Three questions that I have about the article:

1. What if my client does not want to spell out the details when I am trying to set up an agreement?
2. What should I do when the result is not what the client expected?
3. How to work with stakeholders that may be negatively affected by the analysis result?