

SCIENCE THROUGH A SCIENTIST

I will post a list of eminent/distinguished scientists on google docs. Alternatively, you can choose a scientist that is not listed here. But the scientist should have some connection to genetics and genomics. After you pick a name, you will have to write to me with the name of the chosen scientist and get my approval before proceeding.

You will have to pick a scientist and explore everything that the scientist has done, by reading his/her papers, summarize their central theme of research and their work as grad student, work as postdoc, how they have continued or changed their work from their grad or postdoc work, hypothesis/hypotheses of each of their research projects, overall contributions, discoveries, landmark papers, current work, potential challenges in the field of his/her research, and any recognitions (awards) received. I want you to explore how, why, and what aspects of a scientist's research led to specific discoveries and how this has contributed to our understanding of biology overall. Use Pubmed, Google Scholar, etc to find the information. Please cite the source of the information. Plagiarizing of sentences from papers or Internet will have serious consequences (please see the syllabus on this policy).

All these should fit within an 8-10 page (single spaced, 12 font, Times New Roman, 1 inch margin all sides) write up. I am happy to look at drafts of your write up before you finalize it.

You can use the following questions as a guide for your project. You are encouraged to add more details than that covered in the questions.

1. About the scientist
 - a. What is the main research topic of research of the scientist?
 - b. What is the potential hypothesis of his/her research? If there is no hypothesis, state what is the central question or research theme
 - c. What was the scientist's work as a grad student (ii) as a postdoc, if any, and (iii) current research.
 - d. Is there a logical transition from the scientist's work as a graduate student to postdoc work to current research interest as an independent investigator?
2. Background of research of the scientist
 - a. Please write some background work on this research and what is the direction of your chosen scientist's work? Here list names of pioneers in the field, landmark papers before the chosen scientist started working in this field.
 - b. What was the prevailing understanding of the concept in the field before the scientist started working in this area?
 - c. What are the major methodological innovations of their work? Did the scientist (or his group) develop any new techniques/technologies?
3. Relevance and related work
 - a. How is the work different from other scientists in the same field?
 - b. Name two researchers working in the same area of work.
 - c. What are the potential challenges in the field?
4. Contributions and landmarks
 - a. What are the major contributions of your chosen scientist? List five top publications that have contributed to our major understanding of the field and summarize two of the top publications (half page each).
 - b. What are the other papers that have cited and have been influenced by the work of this scientist?
 - c. Awards and recognitions, if any
5. Impact on other's work and follow-up work by other groups
 - a. List five publications that have cited major papers of this scientist.
 - b. Summarize two of those major papers. Clearly state what additional details these follow-up papers added? The entire summary of two papers should be less than one page. The follow-up papers can carry the name of your scientist (as a co-author) but he/she should not be the corresponding or first author.