

How to mentor (A personal experience in biomedical research)

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Outline-How to mentor

- **How to pick a mentee**
- **How to assign work**
- **To inspire creativity**
- **How to do research**
- **Be open minded**
- **Be a role model**
- **Be positive**
- **Conclusion**

How to pick a mentee

- **Must have an interview**
- **Find out as to why they are here**
- **Does training background matter?**
- **Pick the most motivated person(s)**

How to assign work

- **There are four types of mentees and each must be managed differently.**
- **To assign the right job to the right person**
- **Factor in the individual knowledge and capability**
- **Factor in personality, motivation, and willingness to work**
- **Factor in timeline, magnitude, and resources**
- **You should respect all and challenge them to reach their fullest potential**
- **To discuss in person and follow up meetings**

Four types of mentee

Type 1: They are the most motivated, often intelligent. They will generate novel research project on their own thinking. They can be auto-pilot with minimal amount of mentoring. All you need to do is to encourage and to inspire.

Type 2: They are a step below those in type 1 but still not bad at all. They are hardworking but prefer to pick from many topics available under your supervision.

Type 3: They are not comfortable to be autonomous. They prefer the mentor to assign a specific research project and will do a good job.

Type 4: They are lazy and not interested in anything. They have a tendency to complain a lot as if all the mishaps are not their fault. They are high maintenance and try not to recruit them. If they are recruited, once in a while, they can be inspired to produce.

Your job is to inspire creativity

- The name of the game is:
“guidance and inspiration”.
- To defy the old saying: You can lead the horse to water, but you can't make it to drink.
- Innovation and creativity: To go where no man has gone before
- The first step: To be observant and to ask questions: How, why, and what

How to do research

1. To search the literature and learn the state of the field
2. To generate questions: how, why, and what
3. To generate hypothesis
4. To design experiments to tackle the hypothesis
5. To execute experiments and to generate results
6. To analyze the results.
7. To evaluate and re-evaluate results.
8. To derive conclusions and to prepare report
9. To generate new questions and new ideas
10. To repeat steps 1-9

Be open minded

- **Accept failures**
- **Do not always trust the authority**
- **Evaluate and re-evaluate**
- **Opportunity for new paradigm**
- **Create new hypothesis, methodology, and strategy**

Be a role model

- 1. A mentor is watched constantly by mentees**
- 2. This is an opportunity to set an example and to lead**
- 3. Three principles to follow: honesty, generosity and hard work.**
- 4. Be kind and to help others with their best interest**
- 5. The opportunity and responsibility to shape the future of students**

Be positive

- **Must project a positive attitude at all times**
- **To start now and rake in benefits**

Three stories

- 1. A case of Dr. William Summerline**
- 2. Driving experience in Scandinavia**
- 3. Crossing the street**

Take home lesson: Basic ethical and moral standards

Partners in teaching

- **Teacher**
- **Family**
- **Peers**
- **Society**
- **Teachers are the driving force**

Conclusion

- **A good mentors will not only teach the trick of the trade but also will inspire students to become a better human being**
- **A good mentorship can increase productivity**
- **A good mentorship can help students to lead a better life**
- **A good mentorship can help the whole society**
- **Thank you**