

Supervisor's report of the bachelor/diploma thesis

Author's name : Marta Zbožinková

Title of thesis: Study of growth kinetics of 3D cultures of cancer cells and its effect on drug response

Type of thesis *: Diploma

| Criteria of thesis classification | Classification** | | | | | | |
|---|------------------|---|---|---|---|---|------------------------|
| | A | B | C | D | E | F | impossible to evaluate |
| Interest in the topic (work with literature, discussions with supervisor..) | A | | | | | | |
| Independence of student during process of thesis | A | | | | | | |
| Stylistic level | A | | | | | | |
| Working activity | A | | | | | | |
| Independence in carrying out experiments | B | | | | | | |
| Evaluation and interpretation of experimental results | B | | | | | | |
| Classification level*: | A B C D E F | | | | | | |

Comments and question to answer.

I'd like to congratulate the candidate for a successful thesis. I must also complement the student as a supervisor for her courage to work on this topic after being informed that the entire work will have to be produced in English. After having examined her closely in the lab, I have no hesitation to place her among top 5% students in my lab.

I have some general questions for the candidate-

1. If you were to do it all over again, what changes would you make to your thesis?
2. What specific aspect of your thesis will be practically useful for the research group at IMTM?

Notes:

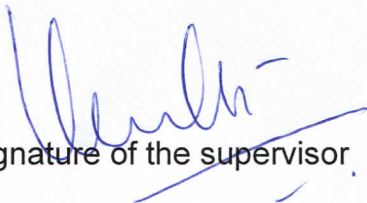
* Delete as applicable.

** Rating mark with a cross.

3. Comment on your research methodology. Why have you done it this way? What are the alternatives to your approach?
4. On page 15, the candidate says about the necessity of using sufficient concentration of anticancer drugs to overcome multiple drug penetration barriers. Can you also tell us more about the possibility of using drug tagged to nanoparticles that have better chances to tumor tissue penetration?
5. What causes a polyp to form?
6. Does diet play an important role in development of CRC? What kind of diet would be help in the prevention of CRC?
7. What is a PET scan and can it be used for colon cancer detection instead of a colonoscopy?
8. Is there any relationship between CRC and irritable bowel disease?
9. Can you give examples of drugs that are affected by alkalization and acidification of extracellular space?
10. What are the current different methods available for 3D culture of cancer cells?

Recommendation for defence: yes/no

In Olomouc...18.5.2015


Signature of the supervisor

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Notes:

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** Rating mark with a cross.