Appendix. Questionnaire/Feedback Form

The purpose of this questionnaire is to seek your feedback on the efficacy of using 3D printed medical device prototypes/models during the lectures and tutorials. Did it facilitate your learning process and help your visualization? Please take few minutes to complete the questionnaire.

Quantitative Feedback: Likert Scale

Please use the following five-point scale to respond to the questions:

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. The use of prototypes/models of medical devices during lectures and tutorials aided my learning process (1, 2, 3, 4, 5)
2. The elaboration and description provided by the lecturer using the real-life prototypes facilitated visual learning (1, 2, 3, 4, 5)
3. The explanation using the prototypes of medical was helpful in my learning process (1, 2, 3, 4, 5)
4. The med device prototypes helped me grasp how such devices are manufactured in a real industrial setting (1, 2, 3, 4, 5)
5. Without the medical device prototypes my learning on the relevant topic would be incomplete and insufficient (1, 2, 3, 4, 5)
6. I would recommend continuing using such medical device prototypes to explain critical and fundamental concepts for future cohorts as well (1, 2, 3, 4, 5)
7. Using such prototypes to explain concepts was a novel and effective way to explain fundamental and critical concepts (1, 2, 3, 4, 5)
8. We never had a prior lecturer using such novel techniques to explain and facilitate our understanding of biomaterials and medical devices (1, 2, 3, 4, 5)
9. Using such prototypes to explain concepts is significantly better and much more helpful than not using them (1, 2, 3, 4, 5)
10. Such prototypes are way more helpful in our understanding than power point slides (1, 2, 3, 4, 5)
11. The lecturer was proficient and very knowledgeable on medical devices and biomaterials and usage of such prototypes facilitated our learning (1, 2, 3, 4, 5)
12. The efficiency of the learning process was increased using the prototypes (1, 2, 3, 4, 5)
13. The student learning outcomes and module learning outcomes were easily achieved using the medical device prototypes/models as a tool to explain critical concepts (1, 2, 3, 4, 5)
14. It was fun and a more efficient learning tool than traditional power point slides (1, 2, 3, 4, 5)
15. The lecturer was quite knowledgeable and aptly able to arouse our interest and help us understand how such medical device prototypes are manufactured in the industry and regulated/approved for marketing (1, 2, 3, 4, 5)

Qualitative Feedback: Please feel free to use additional pages or if you have any additional comments/observations/suggestions. You may either type (preferred, no word limit) or handwrite.

16. How did the usage of medical device prototypes helped in your understanding?

17. How is such novel technique better than power point slides?

18. Why/whynot would you recommend such techniques for future cohorts?

19. What recommendations may you have when using such models for future cohorts?

20. Any shortcoming of the technique? How would you suggest that they be rectified?

21. Do you think this technique is novel, innovative and effective? Why?

22. What would you have missed if this technique was not used?

23. Explain in few sentences how this technique would help in your long-term learning process? Any other suggestions or recommendations?