

Supplementary File 1

Post-training Questionnaire Used in the National CPD Programme in Functional Experimentation

Section I. Overall Evaluation of the Training Programme

1. Is this your first time participating in the on-site West China functional experimentation training programme?

- Yes, this is my first on-site participation
- No, I have participated in previous on-site editions

2. To your knowledge, has your institution previously sent faculty members to attend earlier editions of this on-site training programme?

- Yes
- No
- Not sure

3. What was your primary motivation for participating in this training programme? (Select one)

- Institutional or administrative requirement
- Learning from West China's experience in laboratory management and course organisation
- Strengthening experimental skills and learning new experimental techniques
- Face-to-face academic exchange with peers
- Other (please specify): \_\_\_\_\_

4. Which components of the experimental training did you find most beneficial? (Multiple selections allowed)

- Advanced featured experiments
- Routine functional experimentation teaching and standard operations
- Small animal behavioural experiments
- Human functional experiments
- Demonstration-based experiments

5. Which components of the theoretical lectures did you find most beneficial? (Multiple selections allowed)

- Interdisciplinary curriculum design
- Artificial intelligence-enhanced practical teaching
- Optimisation of traditional experimental courses

6. What additional experimental skills or lecture topics would you like to see included in future programmes?

(Please specify, e.g., "Measurement of human arterial blood pressure"):

7. Please rate the following aspects of the training programme

(5 = very good; 1 = very poor)

| Item                        | 5                        | 4                        | 3                        | 2                        | 1                        |
|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Experimental skill training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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Theoretical lectures

Observation and hands-on practice

Organisation and logistics

8. To what extent would you recommend this training programme to colleagues who have not previously participated?

- I would actively recommend it
- I would recommend it if asked
- I would not recommend it

9. Would you participate in this training programme again in the future?

- Yes
- No

10. How many years have you been involved in functional experimentation teaching?

\_\_\_\_\_ years

11. Are you also involved in teaching basic medical science theory courses? (Multiple selections allowed)

- Physiology
- Pathophysiology
- Pharmacology
- Other disciplines (please specify): \_\_\_\_\_
- No

12. If you were to participate in similar training in the future, what would you prefer? (Multiple selections allowed)

- Fewer experiments with deeper focus on a single skill
- More experiments covering multiple techniques
- More lectures addressing student laboratory teaching and technical challenges
- More advanced or higher-difficulty experiments

13. Regarding the structure of the training content, you would prefer: (Multiple selections allowed)

- Fewer lectures
- No lectures, experimental exchange only
- Integration of lectures with experimental sessions
- More lectures

14. Please provide any suggestions or new ideas regarding the organisation of the programme:

\_\_\_\_\_

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## Section II. Current Status of Functional Experimentation Teaching at Your Institution

15. What type of institution are you currently affiliated with?

- Undergraduate medical institution
- Vocational or junior college

16. How many teaching hours are allocated to functional experimentation courses at your institution?

- ≤ 10 hours
- 10–20 hours
- 20–50 hours
- >50 hours
- Not sure

17. What is the primary format of functional experimentation teaching at your institution?

- Primarily animal experiments
- Primarily human functional experiments
- Primarily virtual simulation experiments
- A balanced combination of animal, human and virtual experiments

18. How are functional experimentation courses organised at your institution?

- A single integrated course (not separated into physiology, pathophysiology and pharmacology)
- An integrated functional experimentation course plus separate discipline-specific experiments
- A course integrating three or more basic medical disciplines
- No dedicated functional experimentation course

19. Do you think your institution should increase the use of human functional experiments?

- Strongly agree
- Agree, but safety and ethical considerations must be ensured
- Neutral
- Disagree

20. In your opinion, in which direction should virtual simulation experiments develop? (Multiple selections allowed)

- Visualisation and interactivity of functional experimentation concepts
- Clarification of experimental procedures
- Integration of basic and clinical medicine
- Skill training through combined virtual–real experiments
- High-difficulty experiments that are hard to implement in class
- Other: \_\_\_\_\_

21. Which laboratory facilities or equipment do you think require improvement or expansion? (Multiple selections allowed)

- Integrated signal acquisition and processing systems
- Human functional experimentation systems
- Animal behavioural experiment systems
- Student innovation and research equipment

Virtual simulation training equipment

Other: \_\_\_\_\_

\_\_\_\_\_

#### Note

This questionnaire was developed specifically for the evaluation of the national continuing professional development programme in functional experimentation.