

# Medical Biotechnology and Laboratory Science ≈ Pathological technique

## Textbook :

1. Laboratory method in histotechnology of armed force institute of pathology, 1992
2. The Art & Science of Cytopathology Exfoliative Cytology, Richard M. DeMay, MD
3. The Art & Science of Cytopathology Aspiration Cytology, Richard M. DeMay, MD

## Reference book :

1. Manual of histologic staining methods of the Armed Forces Institute of Pathology
2. 病理切片技術與組織學染色法 作者:邱金賜編譯
3. Anatomic Pathology Checklist
4. Laboratory General Checklist
5. 外科病理取材圖解指南
6. 子宮頸抹片篩檢資料申報系統
7. The Bethesda System for Reporting Cervical Cytology
8. 醫學分子檢驗  
作者：吳俊忠 總校閱;吳俊忠;李宏謨;孫光蕙;趙崇義 主編

## Course Description :

Brief Introduction: the course includes pathology and cytology specimen collection, preparing formalin-fixed and paraffin-embedded tissue blocks, techniques on frozen sections, cytology screening and interpretation, special staining, immunohistochemistry, principles of transmission electron microscopy, and handling molecular pathological specimens and the interpretation.

## Teaching schedule :

| Week | Date       | Class time  | Teaching progress  | Teacher       |
|------|------------|-------------|--|---------------|
| W1   | 07/18(Tu)  | 15:10~16:00 | Procedure of Pathological Examination  | Jui-Chu Wang  |
| W2   | 07/25 (Tu) | 15:10~16:00 | Methods and Interpretation of Gynecological Cytology   | Ya-Huei Wang  |
| W3   | 08/01 (Tu) | 15:10~16:00 | Treatment and Interpretation Standard of Cytological Examination                             | Ya-Huei Wang  |
| W4   | 08/08 (Tu) | 15:10~16:00 | Cytology Quality Management  | Jui-Chu Wang  |
| W5   | 08/15 (Tu) | 15:10~16:00 | The Processing of Surgical Pathology Specimen  | Yeh-Tzu Chou  |
| W6   | 08/22 (Tu) | 15:10~16:00 | The Principle of Surgical Specimen Examination   | Yeh-Tzu Chou  |
| W7   | 08/29 (Tu) | 15:10~16:00 | The Preparation of Formalin-Fixed and Paraffin-Embedded Tissue Block                         | Chi-Fen Tseng |
| W8   | 09/05 (Tu) | 15:10~16:00 | Frozen Section Techniques  | Chun-Yi Liu   |
| W9   | 09/12 (Tu) | 15:10~16:00 | Midterm Examination  | Chi-Jung Yang |
| W10  | 09/19 (Tu) | 15:10~16:00 | Introduction of Special Stains   | Chi-Jung Yang |
| W11  | 09/26 (Tu) | 15:10~16:00 | Introduction of Immunohistochemistry (IHC)   | Jui-Chu Wang  |
| W12  | 10/03 (Tu) | 15:10~16:00 | Clinical Applications of Immunohistochemistry (IHC)  | Ren-Chin Wu   |
| W13  | 10/10 (Tu) | 15:10~16:00 | <b>Holiday (國慶日)</b>   |               |
| W14  | 10/17 (Tu) | 15:10~16:00 | Introduction of Transmission Electron Microscopy   | Pei-Yu Chen   |
| W15  | 10/24 (Tu) | 15:10~16:00 | Molecular Pathology - Introduction of Gene Mutation Identification and Clinical Applications | Sheng-Chi Hsu |
| W16  | 10/31 (Tu) | 15:10~16:00 | Molecular Pathology – Introduction of Fluorescence In Situ Hybridization (FISH)              | Shang-En Li   |
| W17  | 11/07 (Tu) | 15:10~16:00 | Molecular Pathology – Clinical Applications of Fluorescence In Situ Hybridization (FISH)     | Shang-En Li   |
| W18  | 11/14 (Tu) | 15:10~16:00 | Final Examination  | Ren-Chin Wu   |