

# TABLE OF CONTENTS

## SECTION 1 General

|                                 |      |
|---------------------------------|------|
| Introduction                    | 1-2  |
| <i>Susan C. Lester, MD, PhD</i> |      |
| Quality Assurance               | 1-6  |
| <i>David P. Frishberg, MD</i>   |      |
| Safety Precautions              | 1-14 |
| <i>Susan C. Lester, MD, PhD</i> |      |
| Telepathology                   | 1-20 |
| <i>David P. Frishberg, MD</i>   |      |

## SECTION 2 Methods

|                                               |      |
|-----------------------------------------------|------|
| Gross Examination                             | 2-2  |
| <i>Susan C. Lester, MD, PhD</i>               |      |
| Cytologic Examination                         | 2-8  |
| <i>David P. Frishberg, MD</i>                 |      |
| Frozen Section                                | 2-24 |
| <i>Susan C. Lester, MD, PhD</i>               |      |
| Slide Preparation                             | 2-32 |
| <i>Susan C. Lester, MD, PhD</i>               |      |
| Lymph Nodes: Molecular Methods for Evaluation | 2-38 |
| <i>Susan C. Lester, MD, PhD</i>               |      |

## SECTION 3 Contents

|                                          |      |
|------------------------------------------|------|
| Adrenal and Paraganglia: Diagnosis       | 3-2  |
| <i>Vania Nosé, MD, PhD</i>               |      |
| Anterior Mediastinal Mass: Diagnosis     | 3-12 |
| <i>Matthew R. Lindberg, MD</i>           |      |
| Appendix: Diagnosis                      | 3-18 |
| <i>Amitabh Srivastava, MD</i>            |      |
| Bone Lesion/Tumor: Diagnosis and Margins | 3-22 |
| <i>Matthew R. Lindberg, MD</i>           |      |
| Breast: Diagnosis                        | 3-32 |
| <i>Susan C. Lester, MD, PhD</i>          |      |

|                                                          |       |
|----------------------------------------------------------|-------|
| Breast: Margins                                          | 3-38  |
| <i>Susan C. Lester, MD, PhD</i>                          |       |
| Bronchus and Trachea: Diagnosis                          | 3-42  |
| <i>Matthew R. Lindberg, MD</i>                           |       |
| Cerebellum and Brainstem: Diagnosis                      | 3-44  |
| <i>Rebecca D. Folkerth, MD &amp; Rolf Pfannl, MD</i>     |       |
| Cerebral Hemispheres: Diagnosis                          | 3-52  |
| <i>Rebecca D. Folkerth, MD &amp; Rolf Pfannl, MD</i>     |       |
| Colon: Diagnosis and Margins                             | 3-62  |
| <i>Amitabh Srivastava, MD</i>                            |       |
| Colon: Evaluation for Hirschsprung Disease               | 3-66  |
| <i>Karen S. Thompson, MD</i>                             |       |
| Esophagus: Diagnosis and Margins                         | 3-70  |
| <i>Amitabh Srivastava, MD</i>                            |       |
| Fallopian Tube: Diagnosis                                | 3-76  |
| <i>Charles Matthew Quick, MD</i>                         |       |
| Head and Neck Mucosa: Diagnosis and Margins              | 3-80  |
| <i>Jeffrey F. Krane, MD, PhD &amp; Stefan Kraft, MD</i>  |       |
| Kidney, Adult: Diagnosis and Margins                     | 3-84  |
| <i>Roni Michelle Cox, MD</i>                             |       |
| Kidney: Evaluation of Allograft Prior to Transplantation | 3-96  |
| <i>Lynn D. Cornell, MD</i>                               |       |
| Kidney Needle Biopsy: Evaluation for Adequacy            | 3-100 |
| <i>Lynn D. Cornell, MD</i>                               |       |
| Kidney, Pediatric: Indications and Utility               | 3-104 |
| <i>Karen S. Thompson, MD</i>                             |       |
| Larynx: Diagnosis and Margins                            | 3-112 |
| <i>Jeffrey F. Krane, MD, PhD &amp; Stefan Kraft, MD</i>  |       |
| Liver, Capsular Mass: Diagnosis                          | 3-116 |
| <i>Amitabh Srivastava, MD</i>                            |       |
| Liver: Evaluation of Allograft Prior to Transplantation  | 3-118 |
| <i>Amitabh Srivastava, MD</i>                            |       |
| Liver, Intrahepatic Mass: Diagnosis and Margins          | 3-124 |
| <i>Amitabh Srivastava, MD</i>                            |       |
| Lung: Margins                                            | 3-128 |
| <i>Matthew R. Lindberg, MD</i>                           |       |
| Lung: Nonneoplastic Diffuse Disease: Diagnosis           | 3-132 |
| <i>Matthew R. Lindberg, MD</i>                           |       |

|                                                                                                                                        |       |                                                                                                 |       |
|----------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------|-------|
| Lung Mass: Diagnosis<br><i>Matthew R. Lindberg, MD</i>                                                                                 | 3-136 | Skin: Mohs Micrographic Surgery<br><i>Christine J. Ko, MD &amp; David S. Cassarino, MD, PhD</i> | 3-268 |
| Lymph Nodes, Axillary: Diagnosis<br><i>David P. Frishberg, MD</i>                                                                      | 3-144 | Soft Tissue: Evaluation For Necrotizing Fasciitis<br><i>David S. Cassarino, MD, PhD</i>         | 3-274 |
| Lymph Nodes Below Diaphragm: Diagnosis<br><i>Susan C. Lester, MD, PhD</i>                                                              | 3-152 | Soft Tissue Mass: Diagnosis and Margins<br><i>David S. Cassarino, MD, PhD</i>                   | 3-276 |
| Lymph Nodes: Diagnosis of Suspected Lymphoproliferative Disease<br><i>Susan C. Lester, MD, PhD</i>                                     | 3-156 | Spinal Cord: Diagnosis<br><i>Rebecca D. Folkerth, MD &amp; Rolf Pfannl, MD</i>                  | 3-280 |
| Lymph Nodes, Head and Neck: Diagnosis<br><i>Jeffrey F. Krane, MD, PhD &amp; Stefan Kraft, MD</i>                                       | 3-162 | Stomach: Diagnosis and Margins<br><i>Amitabh Srivastava, MD</i>                                 | 3-286 |
| Lymph Nodes, Mediastinal: Diagnosis for Staging and Lymphadenopathy<br><i>David P. Frishberg, MD</i>                                   | 3-168 | Thyroid: Diagnosis<br><i>Vania Nosé, MD, PhD</i>                                                | 3-290 |
| Meninges: Diagnosis<br><i>Rebecca D. Folkerth, MD &amp; Rolf Pfannl, MD</i>                                                            | 3-174 | Ureter: Margins<br><i>Roni Michelle Cox, MD</i>                                                 | 3-298 |
| Nasal/Sinus: Diagnosis of Suspected Fungal Rhinosinusitis<br><i>Jeffrey F. Krane, MD, PhD &amp; Stefan Kraft, MD</i>                   | 3-180 | Uterus, Endometrium: Diagnosis<br><i>Charles Matthew Quick, MD</i>                              | 3-306 |
| Nasal/Sinus: Diagnosis of Suspected Neoplasia<br><i>Jeffrey F. Krane, MD, PhD &amp; Stefan Kraft, MD</i>                               | 3-184 | Uterus, Endometrium: Diagnosis of Pregnancy<br><i>Charles Matthew Quick, MD</i>                 | 3-310 |
| Oropharynx and Nasopharynx: Diagnosis<br><i>Jeffrey F. Krane, MD, PhD &amp; Stefan Kraft, MD</i>                                       | 3-190 | Uterus, Myometrium: Diagnosis<br><i>Charles Matthew Quick, MD</i>                               | 3-314 |
| Ovary, Mass: Diagnosis<br><i>Charles Matthew Quick, MD</i>                                                                             | 3-194 | Vulva: Diagnosis and Margins<br><i>Charles Matthew Quick, MD</i>                                | 3-318 |
| Pancreas, Biopsy: Diagnosis<br><i>Amitabh Srivastava, MD</i>                                                                           | 3-206 |                                                                                                 |       |
| Pancreas Resection: Parenchymal, Retroperitoneal, and Bile Duct Margins<br><i>Amitabh Srivastava, MD</i>                               | 3-210 |                                                                                                 |       |
| Parathyroid Gland: Diagnosis and Margins<br><i>Vania Nosé, MD, PhD</i>                                                                 | 3-218 |                                                                                                 |       |
| Peripheral Nerve and Skeletal Muscle: Allocation of Tissue for Special Studies<br><i>Rebecca D. Folkerth, MD &amp; Rolf Pfannl, MD</i> | 3-228 |                                                                                                 |       |
| Peritoneal/Omental Mass: Biopsy<br><i>Charles Matthew Quick, MD</i>                                                                    | 3-230 |                                                                                                 |       |
| Pituitary<br><i>Vania Nosé, MD, PhD</i>                                                                                                | 3-240 |                                                                                                 |       |
| Pleura: Diagnosis<br><i>Matthew R. Lindberg, MD</i>                                                                                    | 3-252 |                                                                                                 |       |
| Revision Arthroplasty: Evaluation of Infection<br><i>Matthew R. Lindberg, MD</i>                                                       | 3-254 |                                                                                                 |       |
| Salivary Gland: Diagnosis and Margins<br><i>Jeffrey F. Krane, MD, PhD &amp; Stefan Kraft, MD</i>                                       | 3-256 |                                                                                                 |       |
| Skin: Diagnosis and Margins<br><i>David S. Cassarino, MD, PhD</i>                                                                      | 3-262 |                                                                                                 |       |
| Skin: Evaluation for TEN vs. SSSS<br><i>David S. Cassarino, MD, PhD</i>                                                                | 3-266 |                                                                                                 |       |