

# Contents

Foreword .....	III
Background: CERoPath project .....	V
Contents .....	1
<b>1. Trapping rodents .....</b>	<b>3</b>
1.1. Trapping techniques .....	3
1.2. Trapping protocol .....	4
1.3. Recording trapping data .....	5
<b>2. Dissecting rodents .....</b>	<b>6</b>
2.1. Organization of the field laboratory .....	6
2.1.1. Processing site .....	6
2.1.2. Avoid handling live animals .....	6
2.1.3. Preparation of tubes .....	6
2.2. Euthanasia .....	7
2.3. Collection of ectoparasites .....	9
2.4. Blood collection .....	10
2.4.1. Blood collection from the base of the tail .....	10
2.4.2. Blood collection from the orbital sinus (retro-orbital) .....	10
2.4.3. Blood collection by cardiac puncture .....	11
2.4.4. Blood collection from a dead rodent .....	11
2.4.5. Serum separation and blood storage .....	11
2.5. Dissection .....	14
2.5.1. Separation of organs .....	14
2.5.2. Hemoparasites: detection, identification and cryopreservation .....	18
2.5.3. <i>Leptospira</i> : culture preparation from kidneys .....	19
2.5.4. Orthopoxviruses: culture preparation from urine and tracheal mucus .....	19
<b>3. Identifying rodents .....</b>	<b>20</b>
3.1. External identification .....	20
3.1.1. External measurements .....	20
3.1.2. Sex determination .....	22
3.1.3. Maturity determination and development stage .....	22
3.1.4. Data recording and species identification .....	23
3.2. Morphometrics .....	24
3.3. Genetics .....	25
3.3.1. Species-specific PCR-tests .....	25
3.3.2. DNA barcoding .....	27
3.4. Cytogenetics: karyotyping and tissue sampling for fibroblast cell culture .....	29
3.4.1. Karyotypes: mitotic chromosome preparation from bone marrow .....	29
3.4.2. Tissue sampling for cell culture .....	31
<b>4. Isolation of helminths from rodents .....</b>	<b>32</b>
4.1. Gastrointestinal (GI) tract and helminths isolation .....	32
4.2. Helminths collection in the gastrointestinal tract .....	34
4.3. Method for karyological analysis of helminths .....	35
4.4. Helminths fixation for scanning electron microscopy .....	35
<b>5. Preparing rodent specimens for collections .....</b>	<b>36</b>
5.1. Dry collections .....	36
5.1.1. Skin preparation .....	36
5.1.2. Skull preparation .....	37
5.2. Wet collections .....	38
5.3. Data sharing with online collections .....	38
References .....	39
Other relevant guidelines .....	39
Glossary .....	40
List of figures .....	42
List of tables .....	43
Appendixes .....	43