

**NARKOVET CONSULTING's Clinical Training Program: *Practice of Anesthesia & Perioperative Analgesia in Small Animals***



Promoting and Advancing Anesthesia  
& Analgesia Care Animals Deserve



**Participants: 3 - 4 (minimum 3)**

**Prerequisite: Veterinarian or Licensed Veterinary Technician, preferably during or following participation in comprehensive CE, Certificate, or Master courses in Small Animal Anesthesia & Analgesia (e.g. ESAVS-Europe, ESAVS-ASIA, Improve International, UNISVET, VASTA)**

**Program coordinator: Prof. Dr. B. Driessen, University of Pennsylvania**

**Instructors: Dr. U. Morath, Dipl. ECVAA and other NARKOVET CONSULTING® LLC. affiliated Dipl. ECVAA and/or ACVAA**

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**Location: Small Animal Hospital Dr. M. Frank, Mooswaldallee 10, 79108 Freiburg i. Br., Germany**

**Program Fees: 450.00 EURO per day/person plus 19 % VAT (10 % discount if booked as 2-week program with 2 x 5 consecutive days with one weekend in between)**

| Day  | Weekday | Time          | Location    | Clinical Training Hours | Instructor     | Topics                                      | Detailed Teaching Subjects   |  |
|--|---------|---------------|-------------|-------------------------|----------------|---|--|--|
| 1  | Monday  | 8:00 - 12:00  | TBD         | 1 - 3                   | Morath<br>o.o. | Pre-anesthetic Phase (ASA I/II cases 1 - 4) | History, pre-anesthetic examination, ASA classification of physical status, and anesthesia risk assessment in 2-4 selected patients.   |  |
|  |         |               |             |                         |                |   | Formulation of premedication protocols for 2-4 selected patients & discussion.   |  |
|  |         |               |             |                         |                |   | Formulation of anesthesia protocols for 2-4 selected patients & discussion.  |  |
|  |         | 13:00 - 14:00 | Lunch break |                         |                |   |  |  |
|  |         | 14:00 - 17:00 | TBD         | 4 - 6                   | Morath<br>o.o. | Pre-anesthetic Phase (ASA I/II cases 1 - 4) | Principle design of an anesthesia work station, gas leak check, selection of appropriate anesthesia circuit and ET tube; design and function testing of the ventilator (respirator) for 2-4 selected patients. |  |
| Selection, design and function testing of appropriate anesthesia monitors for 2-4 cases, that shall be anesthetized the following day .  |         |               |             |                         |                |   |  |  |
| Assembly of an "emergency box" with emergency drugs and equipment; discussion of potential perianesthetic complications for the 2-4 selected patients that shall be anesthetized the following day; anesthesia record keeping. |         |               |             |                         |                |   |  |  |

| Day           | Weekday     | Time          | Location | Clinical Training Hours | Instructor  | Topics   | Detailed Teaching Subjects  |
|---------------|-------------|---------------|----------|-------------------------|-------------|--|---|
| 2             | Tuesday     | 7:30          | TBD      | P                       | Morath o.o. | Turning on and function testing of the anesthesia workstation. |   |
|               |             | 9:00 - 12:00  | TBD      | 7 - 9                   | Morath o.o. | Anesthetic management (ASA I/II cases 1 & 2)                   | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.  |
|               |             |               |          |                         |             |  | <b>Focus: Maintenance of anesthesia with inhalant anesthetics, monitoring of anesthetic depth and hemodynamic &amp; respiratory functions; recognition &amp; treatment of cardiovascular and respiratory dysfunction; assessment of hydration status.</b>                           |
|               |             | 14:00 - 17:00 | TBD      | 10- 12                  | Morath o.o. | Anesthetic management (ASA I/II cases 3 & 4)                   | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.  |
|               |             |               |          |                         |             |  | <b>Focus: Maintenance of anesthesia with inhalant anesthetics, monitoring of anesthetic depth and hemodynamic &amp; respiratory functions; recognition &amp; treatment of cardiovascular and respiratory dysfunction; assessment of hydration status.</b>                           |
| 13:00 - 14:00 | Lunch break |               |          |                         |             |  |   |
|               |             |               |          |                         |             | Pre-anesthetic Phase (ASA I/II cases 5 - 8)                    | History, pre-anesthetic examination, ASA classification of physical status, and anesthesia risk assessment, formulation of proper premedication & anesthesia protocols, selection of anesthesia equipment for 2-4 selected patients, which shall be anesthetized the following day. |

| Day  | Weekday   | Time          | Location    | Clinical Training Hours                      | Instructor  | Topics  | Detailed Teaching Subjects  |  |
|--|-----------|---------------|-------------|--|---|---|---|--|
| 3  | Wednesday | 7:30          | TBD         | P  | Morath o.o.   |   | Set-up of anesthesia workstation.   |  |
|  |           | 9:00 - 12:00  | TBD         | 13 - 15                                      | Morath o.o.   | Anesthetic management (ASA I/II cases 5 & 6 ) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.        |  |
|  |           |               |             |  |   |   | Sole inhalation anesthesia, <b>Focus: Maintenance of adequate respiratory function and support through mechanical ventilation (MV).</b> |  |
|  |           |               |             |  |   |   | <b>Weaning off from MV;</b> recovery phase and postoperative analgesia - concluding discussion of anesthetic case management.           |  |
|  |           | 13:00 - 14:00 | Lunch break |  |   |   |   |  |
|  |           | 14:00 - 17:00 | TBD         | 10- 12                                       | Morath o.o.   | Anesthetic management (ASA I/II cases 7 & 8 ) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.        |  |
| Sole inhalation anesthesia, Focus: Maintenance of adequate hemodynamic function and support with cardiovascular support drugs. |           |               |             |  |   |   |   |  |
|  |           |               |             | Pre-anesthetic Phase (ASA I/II cases 9 - 12) | History, pre-anesthetic examination, ASA classification of physical status, and anesthesia risk assessment, formulation of proper premedication & anesthesia protocols, selection of anesthesia equipment for 2-4 selected patients, which shall be anesthetized the following day. |   |   |  |

| Day | Weekday  | Time          | Location    | Clinical Training Hours                       | Instructor  | Topics  | Detailed Teaching Subjects   |  |
|-----|----------|---------------|-------------|---|---|---|--|--|
| 4   | Thursday | 7:30          | TBD         | P   | Morath o.o.   |   | Set-up of anesthesia workstation.  |  |
|     |          | 9:00 - 12:00  | TBD         | 13 - 15                                       | Morath o.o.   | Anesthetic management (ASA I/II cases 9 & 10 )  | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions. |  |
|     |          |               |             |   |   |   | Sole inhalation anesthesia or balanced anesthesia; <b>Focus: high vs low flow anesthesia</b>                                     |  |
|     |          |               |             |   |   |   | Recovery phase and postoperative analgesia - concluding discussion of anesthetic case management.                                |  |
|     |          | 13:00 - 14:00 | Lunch break |   |   |   |  |  |
|     |          | 14:00 - 17:00 | TBD         | 10- 12  | Morath o.o.   | Anesthetic management (ASA I/II cases 11 & 12 ) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions. |  |
|     |          |               |             |   |   |   | Sole inhalation anesthesia or balanced anesthesia; <b>Focus: high vs low flow anesthesia</b>                                     |  |
|     |          |               |             |   |   |   | Recovery phase and postoperative analgesia - concluding discussion of anesthetic case management.                                |  |
|     |          |               |             | Pre-anesthetic Phase (ASA I/II cases 13 - 16) | History, pre-anesthetic examination, ASA classification of physical status, and anesthesia risk assessment, formulation of proper premedication & anesthesia protocols, selection of anesthesia equipment for 2-4 selected patients, which shall be anesthetized the following day. |   |  |  |

| Day           | Weekday | Time          | Location    | Clinical Training Hours                         | Instructor   | Topics  | Detailed Teaching Subjects   |
|---------------|---------|---------------|-------------|---|--|---|--|
| 5             | Friday  | 7:30          | TBD         | P   | Morath o.o.  |   | Set-up of anesthesia workstation.  |
|               |         | 9:00 - 12:00  | TBD         | 13 - 15   | Morath o.o.  | Anesthetic management (ASA I/II cases 13 & 14 )   | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions. |
|               |         |               |             |   |  |   | Maintenance of anesthesia; <b>Focus: Balanced anesthesia</b>   |
|               |         |               |             |   |  |   | Recovery phase and postoperative analgesia - concluding discussion of anesthetic case management.                                |
|               |         | 13:00 - 14:00 | Lunch break |   |  |   |  |
| 14:00 - 17:00 | TBD     | 10- 12        | Morath o.o. | Anesthetic management (ASA I/II cases 15 & 16 ) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions. |   |  |
|               |         |               |             |   |  | Maintenance of anesthesia; <b>Focus: PIVA</b>   |  |
|               |         |               |             |   |  | Recovery phase and postoperative analgesia - concluding discussion of anesthetic case management. |  |

| Day   | Weekday | Time          | Location    | Clinical Training Hours | Instructor     | Topics   | Detailed Teaching Subjects   |  |
|---|---------|---------------|-------------|-------------------------|----------------|--|--|--|
| 6   | Monday  | 8:00 - 12:00  | TBD         | 1 - 3                   | Morath<br>o.o. | Pre-anesthetic Phase (ASA I/II cases 17 - 20)                                      | History, pre-anesthetic examination, ASA classification of physical status, and anesthesia risk assessment in 2-4 selected patients. |  |
|   |         |               |             |                         |                |  | Formulation of premedication protocols for 2-4 selected patients & discussion.   |  |
|   |         |               |             |                         |                |  | Formulation of anesthesia protocols for 2-4 selected patients & discussion.  |  |
|   |         | 13:00 - 14:00 | Lunch break |                         |                |  |  |  |
|   |         | 14:00 - 17:00 | TBD         | 4 - 6                   | Morath<br>o.o. | Blood-gas, Acid-base- & Electrolyte balance management<br>(ASA II-V cases 17 - 20) | Interpretation of abnormal arterial and venous blood gas results and formulation of appropriate treatment options.                   |  |
|   |         |               |             |                         |                |  | Interpretation of abnormal acid-base blood chemistry results and formulation of appropriate treatment options.                       |  |
| Interpretation of abnormal plasma electrolyte chemistry results and formulation of appropriate treatment options. |         |               |             |                         |                |  |  |  |

| Day           | Weekday | Time          | Location    | Clinical Training Hours                        | Instructor  | Topics  | Detailed Teaching Subjects  |
|---------------|---------|---------------|-------------|--|---|---|---|
| 7             | Tuesday | 7:30          | TBD         | P  | Morath o.o.   |   | Set-up of anesthesia workstation.   |
|               |         | 9:00 - 12:00  | TBD         | 7 - 9  | Morath o.o.   | Anesthetic management (ASA II-V cases 17 & 18)  | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.  |
|               |         |               |             |  |   |   | <b>Focus: Maintenance of anesthesia using inhalation agent only, balanced, or TIVA -based anesthesia techniques; assessment of anesthetic depth; Assessment and treatment of cardiovascular and respiratory dysfunctions; diagnosis and treatment of fluid, acid-base, and electrolyte imbalances during anesthesia, where indicated.</b> |
|               |         |               |             |  |   |   | <b>Focus: Recovery phase and perioperative pain management in patients with more complex diseases - concluding discussion of anesthetic patient management.</b>   |
|               |         | 13:00 - 14:00 |             |  |   |   |   |
| 14:00 - 17:00 | TBD     | 10- 12        | Morath o.o. | Anesthetic management (ASA II-V cases 19 & 20) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.  |   |   |
|               |         |               |             |  | <b>Focus: Maintenance of anesthesia using inhalation agent only, balanced, or TIVA -based anesthesia techniques; Assessment of anesthetic depth; assessment and treatment of cardiovascular and respiratory dysfunctions; diagnosis and treatment of fluid, acid-base, and electrolyte imbalances during anesthesia, where indicated.</b> |   |   |
|               |         |               |             |  | Pre-anesthetic Phase (ASA I/II cases 21 - 22)   | History, pre-anesthetic examination, ASA classification of physical status, and anesthesia risk assessment, formulation of proper premedication & anesthesia protocols, selection of anesthesia equipment for 2-4 selected patients, which shall be anesthetized the following day. |   |



| Day   | Weekday   | Time          | Location    | Clinical Training Hours                       | Instructor  | Topics                                   | Detailed Teaching Subjects  |  |
|---|-----------|---------------|-------------|---|---|--|---|--|
| 8   | Wednesday | 7:30          | TBD         | P   | Morath o.o.   |  | Set-up of anesthesia workstation.   |  |
|   |           | 9:00 - 12:00  | TBD         | 7 - 9   | Morath o.o.   | Anesthetic management (ASA II-V case 21) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.  |  |
|   |           |               |             |   |   |  | <b>Focus: Maintenance of anesthesia using inhalation agent only, balanced, or TIVA -based anesthesia techniques; Assessment of anesthetic depth; assessment and treatment of cardiovascular and respiratory dysfunctions; diagnosis and treatment of fluid, acid-base, and electrolyte imbalances during anesthesia, where indicated.</b> |  |
|   |           |               |             |   |   |  | <b>Focus: Recovery phase and perioperative pain management in patients with more complex diseases - concluding discussion of anesthetic patient management.</b>   |  |
|   |           | 13:00 - 14:00 | Lunch break |   |   |  |   |  |
|   |           | 14:00 - 17:00 | TBD         | 10- 12  | Morath o.o.   | Anesthetic management (ASA II-V case 22) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.  |  |
| <b>Focus: Maintenance of anesthesia using inhalation agent only, balanced, or TIVA -based anesthesia techniques; Assessment of anesthetic depth; assessment and treatment of cardiovascular and respiratory dysfunctions; diagnosis and treatment of fluid, acid-base, and electrolyte imbalances during anesthesia, where indicated.</b> |           |               |             |   |   |  |   |  |
|   |           |               |             | Pre-anesthetic Phase (ASA I/II cases 23 - 24) | History, pre-anesthetic examination, ASA classification of physical status, and anesthesia risk assessment, formulation of proper premedication & anesthesia protocols, selection of anesthesia equipment for 2-4 selected patients, which shall be anesthetized the following day. |  |   |  |

| Day   | Weekday  | Time          | Location    | Clinical Training Hours                         | Instructor  | Topics                                   | Detailed Teaching Subjects   |  |
|---|----------|---------------|-------------|---|---|--|--|--|
| 9   | Thursday | 7:30          | TBD         | P   | Morath o.o.   |  | Set-up of anesthesia workstation.  |  |
|   |          | 9:00 - 12:00  | TBD         | 7 - 9   | Morath o.o.   | Anesthetic management (ASA II-V case 23) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.   |  |
|   |          |               |             |   |   |  | <b>Focus: Maintenance of anesthesia using inhalation anesthesia or TIVA techniques plus epidural or other loco-regional anesthesia/-analgesia technique</b>                |  |
|   |          |               |             |   |   |  | <b>Focus: Recovery phase post inhalation anesthesia or TIVA techniques plus epidural or other loco-regional anesthesia/-analgesia technique - post-hoc case discussion</b> |  |
|   |          | 13:00 - 14:00 | Lunch break |   |   |  |  |  |
|   |          | 14:00 - 17:00 | TBD         | 10- 12  | Morath o.o.   | Anesthetic management (ASA II-V case 24) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions.   |  |
| <b>Focus: Maintenance of anesthesia using inhalation anesthesia or TIVA techniques plus epidural or other loco-regional anesthesia/-analgesia technique</b> |          |               |             |   |   |  |  |  |
|   |          |               |             | Pre-anesthetic Phase (ASA I - IV cases 25 - 26) | History, pre-anesthetic examination, ASA classification of physical status, and anesthesia risk assessment, formulation of proper premedication & anesthesia protocols, selection of anesthesia equipment for 2-4 selected patients, which shall be anesthetized the following day. |  |  |  |

| Day  | Weekday | Time          | Location    | Clinical Training Hours                   | Instructor   | Topics                                      | Detailed Teaching Subjects   |  |
|--|---------|---------------|-------------|---|--|---|--|--|
| 10   | Friday  | 7:30          | TBD         | P   | Morath<br>o.o.   |   | Set-up of anesthesia workstation.  |  |
|  |         | 9:00 - 12:00  | TBD         | 7 - 9                                     | Morath<br>o.o.   | Anesthetic management<br>(ASA I-IV case 25) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions. |  |
|  |         |               |             |   |  |   | <b>Focus: Maintenance of anesthesia using inhalation anesthetic agent only or TIVA technique plus multimodal analgesia</b>       |  |
|  |         |               |             |   |  |   | <b>Focus: Recovery phase post inhalation anesthesia or TIVA techniques plus multimodal analgesia - post-hoc case discussion</b>  |  |
|  |         | 13:00 - 14:00 | Lunch break |   |  |   |  |  |
|  |         | 14:00 - 17:00 | TBD         | 10- 12                                    | Morath<br>o.o.   | Anesthetic management<br>(ASA I-IV case 26) | IV catheter placement, premedication, induction of anesthesia & instrumentation to monitor anesthetic depth and vital functions. |  |
| <b>Focus: Maintenance of anesthesia using inhalation anesthetic agent only or TIVA technique plus multimodal analgesia</b> |         |               |             |   |  |   |  |  |
|  |         |               |             | Summary of Clinical Anesthesia Management | <b>Final discussion of all anesthetized cases in Q/A format.</b> |   |  |  |