Table S1. Attitudes of veterinary staff teaching toward early-age gonadectomy (EAG): Questionnaire questions.

- 1. In what year did you graduate from your veterinary degree?
- 2. What university did you graduate from?
- 3. What is your teaching position within the vet school?
- 4. How many hours do you teach? (lecturing/practical classes)
- 5. How many hours do you perform surgery, if any? (i.e., client owned animals)
- 6. How many contact teaching hours do you have on the topic of desexing?
- 7. In your teaching of desexing, does it include:
  - $\Box$  Surgical theory
  - $\Box$  Anesthetic theory
  - $\Box$  Other formal theory
  - □ Practical teaching

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8. To what years of veterinary students do you teach the theory/practical aspects of desexing?
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- □ 1st year
- $\Box$  2nd year
- □ 3rd year
- $\Box$  4th year
- □ 5th year
- 9. For all factors considered, including safety and population control, what age do **you think is best** to neuter for each of the following categories:

(*Please identify one age group for each line*)

Client owned:

Female cats: ≤3 months, OR 4–5 months, OR ≥6 months Male cats: ≤3 months, OR 4–5 months, OR ≥6 months Female dogs: ≤3 months, OR 4–5 months, OR ≥6 months Male dogs: ≤3 months, OR 4–5 months, OR ≥6 months

Animals being re-homed for shelter:

Female cats:  $\leq 3$  months, OR 4–5 months, OR  $\geq 6$  months Male cats:  $\leq 3$  months, OR 4–5 months, OR  $\geq 6$  months Female dogs:  $\leq 3$  months, OR 4–5 months, OR  $\geq 6$  months Male dogs:  $\leq 3$  months, OR 4–5 months, OR  $\geq 6$  months

10. In your **personal opinion** of early-age desexing/EAG, do you advocate its use in:

Female cats—YES/NO Male cats—YES/NO Female dogs—YES/NO Male dogs—YES/NO

If answered no, under what situations would you support EAG?

11. In your **teaching** of desexing of both female and male cats and dogs, are you advocating the use of EAG?

YES/NO

If yes, why?

□ School policy/support

- □ Population control
- □ Benefits
  - □ Less bleeding
  - □ Behavioral changes
  - □ Decreased asthma
  - $\hfill\square$  Decreased gingivitis
  - $\Box$  Decreased urine spraying
  - □ Decreased obesity
- □ Better visualisation
- $\Box$  More elastic tissue
- $\hfill\square$  Less stitching
- $\Box$  Fewer drugs required
- $\Box$  Quicker recovery
- $\Box$  Other-please elaborate.

## If no, why?

- □ School policy/beliefs
- □ Risks
  - □ Anesthetic
  - □ Hypoglycaemia
  - □ Bleeding
  - □ Seroma
  - $\Box$  Hip dysplasia
  - □ Inappropriate elimination
  - □ Cystitis (dogs)
  - □ Urinary incontinence (dogs)
  - $\Box$  Urinary tract obstruction (cats)

## □ Difficulty

- $\Box$  Hands too big
- □ Unfamiliarity
- $\hfill\square$  Convincing owners
- $\Box$  Friability of tissue
- $\Box$  Other—please elaborate.
- 12. About how many kittens, 4months or younger, have you desexed in the last 12 months **without** students?
- 13. About how many kittens, 4 months or younger, have you desexed in the last 12 months **with** students?
- 14. About how many puppies, 4months or younger, have you desexed in the last 12 months **without** students?
- 15. About how many puppies, 4 months or younger, have you desexed in the last 12 months with students?
- 16. In your opinion, do you believe that implementing routine desexing of client-owned kittens before 4 months of age would result in a measurable reduction in the number of unwanted kittens from owned queens that are surrendered to shelters?

YES/NO

Please give reasons to support your answer

- 17. In your experience, what is the approximate proportion of owned cats that have at least one litter of kittens before they are desexed?
  - □ >20-40%
  - □ >40-50%
  - □ >60-80%
  - □ >80-100%

- 18. In your experience, what is the approximate proportion of unwanted kittens from owned queens compared to stray queens?
  - □ >20-40%
  - □ >40-50%
  - □ >60-80%
  - □ >80-100%
- 19. What proportion of students have the opportunity to observe an early age desexing procedure at the university you teach at?
- 20. What proportion of students have the opportunity to perform early age desexing at the university you teach at?