

## *Abstract Submission Guidelines*

The following are instructions for completing and formatting your abstract submission.

**Abstract Title** - Capitalize only the first word of the title and proper nouns. Allowable characters include Greek symbols, math operators, up and down arrows, and the degree symbol.\* Allowable formatting includes bold, italics, underline, subscript, and superscript. Character limit = 110 (*Note: Spaces will count against the character limits*).

**Authors** - Separate the authors' names with commas; do not include academic degrees or specialty certification. Please underline **only** the presenting author's name. Allowable formatting includes bold, italics, underline, subscript, and superscript. Character limit = 220 (*Note: Spaces will count against the character limits*).

**Affiliations** - Enter the authors' professional affiliations at the time of the study. Affiliations should be listed in the order in which the authors' names are given in the byline. For authors affiliated with a university, the department, school or college, university, city, and state should be listed (in that order). If authors do not all have the same affiliation, the authors' last names should be given in parentheses to indicate affiliation. Character limit = 330 (*Note: Spaces will count against the character limits*).

**Abstract Content** - Enter the content of your abstract. Do not include blank lines or paragraph breaks. Allowable characters include Greek symbols, math operators, up and down arrows, and the degree symbol. Allowable formatting includes bold, italics, underline, subscript, and superscript. Character limit = 1,750 (*Note: Spaces will count against the character limits*).

**Research Grant** - Enter information on any grants or the source of any third-party funding used to conduct this research (ask your mentor). Alternatively, enter "None" if there was no third-party funding for the research or "Unknown" if you do not know the source of research funding. Character limit = 200 (*Note: Spaces will count against the character limits*).

**Student Support** - Enter information on the source of your student summer research stipend. Alternatively, enter "None" if you did not receive a stipend or "Unknown" if you do not know the source of your research stipend. Character limit = 95 (*Note: Spaces will count against the character limits*).

**Field of Research** - Select your field of research from the drop-down box provided.

\*When entering your content, please only use the symbols available from the Abstract Submissions page (e.g.  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ ,  $\epsilon$ ,  $\kappa$ ,  $\lambda$ ,  $\mu$ ,  $\rho$ ,  $\chi$ ,  $\Delta$ ,  $\Theta$ ,  $\Sigma$ ,  $^{\circ}$ ,  $\downarrow$ ,  $\uparrow$ ). Other symbols may be lost.

### *Sample Abstracts:*

Please review the abstracts below for an example of how your submission might look in the program booklet.

#### Single Author Affiliation Submission:

##### **Efficacy of anticancer drugs in canine mammary carcinoma**

Giovanni Finesso, Annelise Nguyen

Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, Kansas.

Tumors of the mammary gland are the most common tumors of intact female dogs. Most of these tumors are malignant, with a potential of regional and distant metastasis. The range of drugs used for treatment of canine mammary tumor is very limited due to the fact that there is lack of information about the efficacy of available anticancer drugs on canine mammary tumors. The aim of this study is to better understand the effect of anticancer drugs, cisplatin and fulvestrant, on canine mammary carcinoma. CMT27 cell line was used to evaluate the efficacy of the anticancer drugs. The results showed that 10 nM cisplatin and 100 nM fulvestrant for 48 hours caused 47.66% and 83.3% cell viability compared to controls, respectively. Furthermore, cisplatin-treated cells had an increase in Bcl-2 expression compared to control while fulvestrant-treated cells had an increase in Bcl-2 and cyclin D1 expressions. Interestingly, fulvestrant-treated cells reduced

cell migration significantly compared to control. Currently, combinational treatment of cisplatin and fulvestrant are being investigated since these drugs have different modes of action. Overall, the findings demonstrated that cisplatin and fulvestrant have potential role in the treatment of canine mammary carcinoma.

Johnson Cancer Research Center  
Meriel Veterinary Research Scholars Program

### Multiple Author Affiliations Submission:

#### **Equine PCV, Erythrocyte Potassium and Transferrin Correlation**

Bathilda Lake, Kurt Zimmerman, Sharon Witonsky, W. Kent Scarratt, Harold C. McKenzie, III, Tony Huffman, Stephanie Todd, and James Holt

Biomedical Sciences and Pathobiology (Lake, Zimmerman), Large Animal Clinical Sciences (Witonsky, Scarratt, McKenzie), Equine Field Services (Huffman), Infectious Disease Research Facility (Todd), Virginia Maryland College of Veterinary Medicine, Virginia Tech, Blacksburg, VA; New Holland Sales Stable (Holt), New Holland, PA

Differentiating between horses with regenerative and non-regenerative anemia can assist the clinician in determining the cause and treatment. However, evaluating regenerative status in equine anemias is difficult because horses do not release reticulocytes into circulation. The purpose of this pilot study was to determine if there is a relationship between intracellular erythrocyte potassium concentration (K<sup>+</sup>) and surface receptor transferrin expression. It has been shown that transferrin expression increases with erythrocyte immaturity. The hypothesis of this study was that intracellular erythrocyte K<sup>+</sup> would increase in positive correlation with transferrin expression; signifying the utility of intracellular erythrocyte K<sup>+</sup> as a biomarker for identifying equine regenerative anemias. The following were measured in 13 horses: blood packed cell volume (PCV) by microhematocrit tube centrifugation of heparinized blood; serum and lysed heparinized blood K<sup>+</sup> by ion-selective electrode method; mean cell K<sup>+</sup> concentrations (MCKC) normalized for statistical analysis; and transferrin by commercial ELISA assay on lysed heparinized blood. Results included: PCV range 19-54%; MCKC range 63.4-92.4 mEq/L; and transferrin range -43.7-63.7 pg/L. Data were found to be normally distributed. Pearson correlation results were significant for PCV-MCKC (coefficient 0.599, P-value 0.018) and approached significance for MCKC-transferrin (coefficient -0.471, P-value 0.077). However, no association was found between PCV-transferrin (coefficient 0.059, P-value 0.835). These findings do not support the hypothesis that MCKC increases in association with surface receptor transferrin expression in equine erythrocytes.

Research Grant: Virginia Maryland College of Veterinary Medicine  
Student Support: None.