



TUSKEGEE UNIVERSITY
COLLEGE OF VETERINARY MEDICINE
14th ANNUAL PHI ZETA RESEARCH DAY

CALL FOR ABSTRACTS

The purpose of Phi Zeta Research Day is in line with the mission of the Phi Zeta Veterinary Honor Society, which is “to recognize and promote scholarship and research in matters pertaining to the welfare and diseases of animals”. The 14th Annual Tuskegee University College of Veterinary Medicine Phi Zeta Research Day will be held on **Tuesday, September 15, 2026**, in conjunction with the One Health Symposium, Monday, September 14, 2026. This year’s theme is “**Health Technology in One Health**”.

The Objectives of the Event:

1. Encourage students to share their research with the CVM community.
2. Enhance the pertinent skill of being able to present and translate research data to a diverse audience.
3. Provide a forum for the presentation of research being performed at Tuskegee University College of Veterinary Medicine, other institutions, and facilitate collegial interactions and networking.

We would like to invite all student members of the Tuskegee University College of Veterinary Medicine (veterinary students, graduate students, interns) and other related biomedical fields to present your research at the Phi Zeta Research Day. You do not have to be a Phi Zeta member to participate. Presentations will be judged, and monetary awards will be given. **Abstract submission is due by August 21, 2026** to Ms. Tammie Hughley (thughley@tuskegee.edu).

Please indicate if you would like to present your research as an oral presentation or a poster presentation. The committee will make the final decision.

Abstract and Presentation Guidelines:

Abstracts should be no more than 250 words, and typed in size 12 Times New Roman. Submit abstracts electronically in a Microsoft Word Document. Oral presentations should be no more than 15 minutes in length.

Rules for Abstract Submission

1. The abstracts for the oral or poster presentations must be reviewed and approved by your mentor(s). The abstract should then be emailed by either the mentor(s) or yourself.
2. Research should align with the Phi Zeta Honor Society Mission. It is permissible to present research that has been presented at other conferences this year (please specify the date of your presentation if applicable).
3. The presenter should be one of the main contributors to the research work

ABSTRACT SAMPLE

Platelet Lysate as an Autologous Alternative to FBS in Equine Mesenchymal Stem Cell Culture

Demitrius R. Washington, Gus Wright, and Ashlee Watts

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& Biomedical Sciences, Texas A&M University, College Station, Texas

Abstract Content

Bone marrow derived mesenchymal stem cells (MSCs) are used routinely as a therapeutic in treating equine musculoskeletal injury. Fetal bovine serum (FBS) is the current gold standard supplement for MSC culture. However, the use of xenogenic serum, leads to increased risk of immune reaction to implanted cells from internalized xenogenic material. Autologous platelet lysate (PL) might be a suitable alternative to FBS. Whole anti-coagulated blood was collected and platelet rich plasma (PRP) underwent freeze-thaw cycles to make PL. Bone marrow was collected from 5 horses, isolated and expanded in culture supplemented with FBS, FBS with heparin, or autologous platelet lysate with heparin. Colony forming unit assay (CFU) was used to determine if there were differences in MSC isolation success. Morphology and debris were scored to determine differences in MSC health. CellTrace™ violet dye and flow cytometry was used to determine differences in growth kinetics. Flow cytometry for equine cell surface markers and tri-lineage differentiation of MSCs at the fifth passage were used to determine differences in MSC characteristics. The following assays were not different between the medium supplements: MSC morphology and debris scores; CFU number; and MSC cell surface marker profiles. However, there was increased MSC proliferation from PL, having more MSCs in later generations after 72 hours of growth post-label. This is in contrast to total MSC numbers at each passage, as PL supplemented MSCs had significantly lower cell counts compared to those in FBS and FBS heparin. If this trend is consistent with remaining trials and what the relationship of the cell's life span to the proliferation rate is currently being determined.

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Student Support: DHHS HRSA COE Grant # D34HP00001; NIH/SRE 5T35OD010432

Student Name:

Status (1st 2nd 3rd 4th year, graduate student, intern):

Email and telephone contact:

Submission is new or previously presented at:

Year presented:

Preference for Presentation: Oral, Poster, or Either

Mentor Approved: Yes or No

Where was this research conducted?