

Florida Regional Junior Science, Engineering, and Humanities Symposium

STEM Research Competitions- Vertebrate Animals and Human Subjects

Research involving vertebrate animals or human subjects must be conducted under the direct supervision of a qualified teacher or mentor with an approved active protocol which complies with local, state, or federal regulations for such research.

The National Junior Science and Humanities Symposium requires students acknowledge in their written research report and STEM Research Competition Application that proper procedures and protocols were followed. For students selected to compete at the National Junior Science and Humanities Symposium, the Statement of Outside Assistance paperwork must also indicate proper procedures and protocols were followed.

Projects conducted without proper supervision will be disqualified from both Regional and National competition.

The National JSHS Program recognizes that students may conduct research in a high school setting, and both students and teachers may have questions on how to obtain proper approvals if the research is conducted in a school, home, or field research setting versus in a university laboratory.

General guidelines follow on experimentation involving vertebrate animals (adapted from Bonkalski et al, 1994):

- Only animals that are lawfully acquired shall be used in experimentation and their retention and use shall be in every case in strict compliance with state and local laws and regulations.
- Animals used in experimentation must receive every consideration for their bodily comfort; they must be kindly treated, properly fed, and their surroundings kept in a sanitary condition.
- No intrusive techniques may be used, including surgery, injections, or taking of blood.
- When animals are used by students for their education or the advancement of science, such work shall be under the direct supervision of a committee of individuals knowledgeable of applicable regulations governing the care and animal of animals in the conduct of the project.
- At no time should a student do harm to a vertebrate animal in the conduct of the research.

General guidelines follow on research involving human subjects (adapted from Bonkalski et al., 1994):

- No project may use drugs, food, or beverages in order to measure their effect on a person.
- Projects that involve exercise and its effect on pulse, respiration rate, blood pressure, and so on are approved if a valid normal physical examination is on file and provided the exercise is not carried to the extreme.
- If your research involves administration of questionnaires or surveys, a proper consent from subjects must be obtained.
- No human cultures of any type— mouth, throat, skin, or otherwise—will be allowed.
- Tissue cultures purchased from reputable biological supply houses or research facilities are suitable.
- The only human blood that may be used is that which is either purchased or obtained from a blood bank, hospital, or laboratory. No blood may be drawn by any person or from any person specifically for a science project. This rule does not preclude a student making use of data collected from blood tests not made exclusively for a science project. Blood may not be drawn exclusively for a science project.
- Experimentation involving human subjects requires direct supervision of a committee of individuals knowledgeable of applicable regulations governing the conduct of such research. Non-regulated research institutions (i.e. high schools) should establish a committee of knowledgeable teachers and other mentors to view the research plan prior to the conduct of the research.

The above guidelines and standards are set forth by the National JSHS. Regional affiliates may not exempt projects from the guidelines. If there are questions or concerns, please contact the UF Center for Precollegiate Education and Training office, which administers the Florida Regional JSEHS, at 352-392-2310 or jsehs@cpet.ufl.edu.