American Meat Science Association  
Intercollegiate Quiz Bowl  
ICoMST/RMC 2020  

Rules and Guidelines  
The objectives of the American Meat Science Association (AMSA) Intercollegiate Quiz Bowl, held in 2020 at the International Congress of Meat Science and Technology (ICoMST) and Reciprocal Meat Conference (RMC), are to facilitate interaction among students from different universities, to stimulate student’s desire to accumulate and retain knowledge, and to provide a forum for universities to engage in friendly competition – in other words – to have a good time.

I. Schedule  
a. Preliminary and final round locations and times will be determined by the ICoMST/RMC Planning and/or Host committees and relayed to team coaches prior to ICoMST/RMC.
b. For the 2020 Quiz Bowl, two divisions of the Quiz Bowl will be held. The first division will be the Undergraduate Division, consisting only of undergraduate teams. The second division will be the Graduate/International Division consisting of graduate teams or international students. Teams consisting of only undergraduate international students may choose which division to enter, but the committee would recommend entering the Graduate/International division.
i. Graduate students based in the United States wanting to enter the Graduate/International Division must never have competed on nor coached a previous AMSA Intercollegiate Quiz Bowl team. This is to encourage a level playing field with the international students who have not previously competed in the AMSA Quiz Bowl.

II. Eligibility  
a. This year, in order to encourage international student participation, contestants do not need to be members of AMSA to participate in the Quiz Bowl. Each contestant must be registered as a student at the university he or she is representing sometime during the year of competition. Contestants do not need to be registered for ICoMST/RMC if only participating in the Quiz bowl competition.
b. Each student in the Undergraduate Division must be an undergraduate or have received their bachelor’s degree no earlier than the year of the competition. Each student in the Graduate/International Division must be a current graduate student or have received their graduate degree no earlier than the year of the competition OR a current undergraduate or have received their bachelor’s degree no earlier than the year of the competition.
c. All members of the championship team will be ineligible to compete on future teams. Therefore, a competing contestant can win only one Quiz Bowl Competition.

III. Equipment  
a. Game Panel: An appropriate device, buzzer, bell, and/or light, etc. will be used to determine the first contestant to respond to a question.
b. Scoring device: Scores will be recorded in a manner that they will be easily visible to both teams and the audience.

IV. Questions  
a. Members of the AMSA Quiz Bowl Committee will be responsible for developing a competition question bank.
b. Questions for this year’s Quiz Bowl will be more internationally relevant in the spirit of ICoMST. In the Graduate/International Division, this year’s committee will attempt to limit questions that are based solely on United States regulations and standards in order to increase competition in an international playing field. Students are encouraged to study international current events, meat industry history, and regulations. Possible sources of this material are listed below. Questions will be from the following topics. Beside each topic is the primary, but not the sole, source from which questions related to that topic will originate from. Sources are not limited to these sources in any way and the committee reserves the right to update sources as additional sources of material become available.
   - Meat industry history, including dates and legislation – The Meat We Eat
   - Meat industry and meat organizations
   - Muscle structure and function – Principles of Meat Science
   - Slaughter, Conversion of muscle to meat – Principles of Meat Science and The Meat We Eat
Revised 1/9/2020

- Food safety (including USDA and FSIS regulations)
- Meat microbiology – *Modern Food Microbiology*
- Meat grading – *Meat Evaluation Handbook*
- Fabrication and merchandising
- Meat marketing and pricing
- Meat processing, ingredients, & processed products; *The Meat We Eat*
- Packaging
- Factors that affect meat palatability and sensory attributes
- Growth and development
- Role of meat in the diet
- Meat chemistry and color
- Ground Beef
- Exotic Animals
- Plant-based meat analogs and cell-based meat – News sources, [https://cellbasedtech.com/](https://cellbasedtech.com/)
- Product labeling - Food Standards and Labeling Policy Book, 9 CFR 319
- Regulatory- USDA/ FSIS, Food Standards and Labeling Policy Book, 9 CFR 319
- Function of Equipment - *The Meat We Eat*
- Picture Questions
- Other International – Meat Cuts and Muscle Foods: An International Glossary by Howard Swatland
- Any other topic that may be important or current to the meat industry

*Additionally, the Graduate/International Division will include graduate level questions related to:*

- Experimental Design
- Research Methods
- Statistics
- Other advanced graduate meat science material

c. To facilitate learning, all power point files of question rounds from 2007 and prior that are still accessible will be posted on the AMSA website for everyone to review. *The committee does not take responsibility for incorrect answers to questions posted in the power points on the website; it is up to students utilizing these resources to learn from these sources, not simply to memorize the slides as they appear on the website.*
d. Forty primary questions and five secondary questions will be selected from the question bank and assigned to each round by the AMSA Quiz Bowl Committee chair. Primary questions will be read in each round by a moderator. If there is a disputed question or answer, or in the case of a tie, secondary questions will be used. Presentation software (PowerPoint or similar) will be used to display questions to aid in identification and practical questions.
e. Questions can be short answer, fill in the blank, identification, or multiple choice. There will be no true/false questions.

V. **Officials**

a. Chair: Chair of the AMSA Quiz Bowl Committee or another AMSA member appointed by the committee.
b. Eligibility: Members serving as coach of a quiz bowl team cannot serve as a member of the Quiz Bowl Committee or as a judge during the quiz bowl.
c. Moderator: An AMSA member will serve as the moderator. The moderator should be articulate and knowledgeable in general meat science. The moderator should have no discernable connection to any of the teams. The moderator is responsible to ensure that no filming, taping, or recording of questions is taking place by teams or members in the audience.

d. Judges: AMSA members will be selected by the AMSA Quiz Bowl Committee to serve as judges for each round. Ideally, two judges should be present in each room and should be knowledgeable in general meat science.

e. Scorer/Time Keeper: This member will keep score and time for each round.

VI. Teams

a. Each school or university may enter two teams. A $50 entry fee will be assessed each team to offset the costs of materials. Individual students from a university that cannot produce a full team that wish to be placed on a random team in their division may register and pay their portion of the entry fee by contacting Rachel Adams at AMSA (radams@meatscience.org). Teams that wish to be entered in a drawing for an available bye (if available) in the first round of the competition must register by June 16th. Final registration is due by July 3rd, 2020.

b. To help facilitate the development of new questions for the quiz bowl, each team will be required to submit 30 new questions at the time of team registration, using the template provided on the AMSA website. If there are two teams from a given school, 45 new questions must be submitted with their registration. Questions must fall into one of the topic areas described in the template, following the instructions given on the first sheet of the template. Questions submitted must not be regional in nature so that they may be used for the quiz bowl the following year(s). Questions will not be used for the quiz bowl in the year submitted.

c. Teams will consist of 4 team members. If a school is not able to find 4 eligible members, students may contact Rachel Adams at AMSA (radams@meatscience.org) to register individually and be paired with students from another school. Teams may also be formed from separate schools in advance of the competition. Alternate preference will be given to schools with less than 8 quiz bowl participants. Team members may be from more than one school. However, additional awards will not be provided if the winning team is a combined team from multiple locations.

d. One member must be designated as team captain.

VII. Procedures of Play

a. Order of team play
   i. Teams will be assigned into brackets by a lottery.
   ii. The competition will be either a single or double elimination, depending on the number of teams in play.

b. The quiz bowl
   i. Teams will be assembled and seated at their panels. Before play begins, the team captain shall declare themselves to the moderator.
   ii. Team members will be numbered 1 through 4. During the first half of the quiz bowl (questions 1-20), team members will compete head to head with each other as indicated by the moderator. The last half of the quiz bowl round (questions 21-40) will be toss up questions for any member of the team to buzz in and answer.
   iii. The moderator will read each question until a contestant has buzzed in to answer. After the question has been read completely, the question will appear on an overhead screen. If a contestant buzzes in before the question is read completely, it will not be displayed on the overhead screen. Only the first answer given (or when a question calls for more than one answer, only the number of answers requested) will be accepted with no modifications. In certain instances however, the Judge(s) or Moderator may ask the contestant to be more specific in their response. It will be at the Judge(s) discretion whether a contestant is allowed to elaborate on an answer in these cases.
   iv. If a contestant buzzes in and answers the question incorrectly, the opposing team has five seconds to buzz and answer the question.
   v. If neither team attempts to answer the question after five seconds, the moderator will read the answer and ask the next question.
   vi. There will be 40 questions during a round.
   vii. Correct answers for all questions are worth 5 points; incorrect answers will deduct 5 points.
viii. If a contestant buzzes in before the question is read and answers the question incorrectly, the moderator will read the question from the beginning, the question will be displayed on the overhead screen, and the opposing team will have five seconds to buzz in and answer the question.

ix. After a team has buzzed in, the moderator must recognize the player before the player answers the question. If the player answers before being recognized, the answer will be considered incorrect, and the opposing team will have the opportunity to answer.

x. In the case of a tie, a tie-break set of 3 questions will be asked and a winner declared. If there is a tie after the tie-break set of questions is asked, questions will be asked until one team has a greater score.

xi. Once a winner has been declared by the moderator, protests or challenges to questions or format will not be considered.

VIII. Competition Coordinator

a. The winning team at the ICOMST will be declared the AMSA Intercollegiate Quiz Bowl National Champion Team and will receive all awards and honors associated with the title.

b. Any rotating or traveling trophies will be retired to the school or university that wins the trophy three years in succession.

c. The enforcement and review of these Rules and Guidelines will be the responsibility of the AMSA Board of Directors and the Quiz Bowl Committee, with the chair of that committee acting as coordinator.

d. Changes in these rules and guidelines may be made by the AMSA Board of Directors and the Quiz Bowl Committee. These rules and guidelines should be reviewed annually and the appropriate revisions, if any, made.

IX. Code of Conduct

a. Contestants. Contestants are expected to conduct themselves in a professional manner in regard to submitting responses to the competition round moderator. Contestants should always adhere to the principle of representing themselves and their schools with professionalism and in consideration of others.

i. When teams are not in an active competition, they will be held in 1 of 2 holding rooms to be assigned depending on what rounds they have complete. Holding rooms are to be a respectful environment which can facilitate and encourage interaction between students. NO electronics, phones, or study materials are to be present at any time once the contest has begun to limit accusations of cheating or recording of questions and encourage networking between teams.

b. Audience. The audience is expected to remain quiet during the quiz bowl round. Audience interference while the round is in session is not allowed. Recording of quiz bowl questions during a round (via photos, audio, or text) is strictly prohibited and considered cheating. Audience members caught recording questions will be asked to leave the quiz bowl. The session moderator and session judge will determine the proper course of action in the event of any discrepancy or questionable answer/response.
Example Microsoft Excel Team Submission:

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Topic Category</th>
<th>Difficulty (1=easy, 5=difficult)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of poisoning results when histidine in fish is converted to histamine?</td>
<td>Scrombroid poisoning</td>
<td>Microbiology – General and Spoilage</td>
<td>5</td>
<td><a href="https://www.fda.gov/food/seafood-guidance-documents-regulatory-information/scombrotxin-poisoning-and-decomposition">https://www.fda.gov/food/seafood-guidance-documents-regulatory-information/scombrotxin-poisoning-and-decomposition</a></td>
</tr>
</tbody>
</table>