MLAB 2431 IMMUNOHEMATOLOGY
RESEARCH PROJECT

Objectives:
1. Review published journal articles including peer-reviewed articles and select three articles related to the topic.
2. Identify, by highlighting, the passages in the reference material related to the topic.
3. Utilize the highlighted passages to write a college level research paper using proper grammar, punctuation, paraphrasing and formatting.

Instructions:
1. Select a topic related to Immunohematology either from the list or one of interest to you. Submit your suggestion to your instructor by email.

2. Three journal article references are required for your research paper. At least one of the articles must be from a peer-reviewed journal.

   A non peer reviewed article is any article that appears in a newspaper or magazine in which someone else who is an expert in the field the article talks about reviews it. This can be any common print newspaper such as the New York Times or a Magazine such as National Geographic.

   A peer reviewed journal on the other hand means that the article was reviewed and edited by people who have degrees in the subject matter contained in the article. For example if the article is talking about biology a peer reviewed article would be read and edited by people with PhD's in biology before being published.

3. Carefully read your references, you may want to read several times before identifying key points in the article for your paper.
   a. Highlight or underline the sentences IN YOUR PRINTED REFERENCES which contain the focus of your search project.
   b. Several of your references may contain the same important information, be sure to highlight EACH passage in EACH article.
   c. As you write your paper, be sure that you are using the highlighted or underlined passages.

4. Write a 3-5 page (double spaced) paper using a 12 point Times-Roman font, and one inch margins about your topic based on the information you have found. Do NOT plagiarize. Use APA format for your paper if when you cite a reference or cite a quote. You are expected to write the information found in the references into your own words.

5. The research paper must have a coversheet and does not count as one of your pages in the final paper. The coversheet should include the following:
   - Name
   - Date
   - Course title
   - Instructor’s name
   - Title of the research paper

6. The research paper must have a reference page which does not count as one of your pages in the final paper.

7. This assignment is worth 150 points to be added to the lecture grade. The expectation is a quality, college level research paper. Contact the library staff for any assistance you may need in your search for articles related to your paper.

8. Submit your PAPER to ASSIGNMENTS in Blackboard by the due date stated on the course schedule
website. The grading rubric posted in Blackboard will be used to determine your final grade.

9. **Submit your highlighted references to your instructor by the research paper due date. Be sure your name is written at the top of the articles.**

**Suggested topics:** You are **not** limited to this list, any relevant Immunohematology topic will be considered. Beside each topic I have identified example areas to focus on for your paper. You don’t need to address all points listed; this is just to help you define your search.

- Donor Screening process-purpose, newest concerns in screening, percent of donors deferred and reason, new tests being employed to screen including principle and clinical significance
- Crossmatch techniques-AHG, IS, versus computer crossmatch, gel testing
- Antibody detection and identification-methods used, advantages-disadvantages
- Transfusion reactions-Most common, most severe, symptoms, how to handle, SHOT, prevention of sepsis in platelet transfusion
- Hemolytic disease of the fetus and newborn - blood group antibodies involved, symptoms, treatment for the different ones
- Autoimmune hemolytic anemias-how they are diagnosed/treated
- Drug induced hemolysis-how they are diagnosed/drugs which cause hemolysis
- Component therapy-use and indications for the different types of components
- Source and use of the substances which stimulate erythropoiesis and granulocytopenesis
- Bone Marrow Transplants-auto vs. allo, protocol involved in actual transplant
- Stem cell transplants
- Use of umbilical cord blood in transplantation
- Transplantation of solid organs-blood bank considerations
- Transfusion transmitted diseases-HIV, Hepatitis, Chagas Disease, malaria, etc. How frequently does it occur, how is transmission prevented
- Exchange transfusion-indications and protocols for adults versus infants
- Intrauterine transfusions-procedure, selection of blood, indications for performing
- Shortage of Rh Immune Globulin-why is there a shortage, how are they increasing production
- Use of apheresis donors for platelets-selection, time for donation, advantages
- Sickle cell disease and transfusion- background on the disease, transfusion triggers, therapy
- Immunomodulation due to transfusion-define, advantages-disadvantages
- Living Donor Kidney transplants-reason for transfusing patient with blood from donor prior to transplant
- TRALI-Transfusion Related Acute Lung Injury
- Molecular testing in Immunohematology
- Artificial blood
Sample Cover Sheet

(Course Title)

(Instructor Name)

(Title of Paper)

(Graphic - Optional)

Your Name
Date