**ACTIVITIES FOR THIS WEEK #5 Immune System/PESILAD—Measles**

**Overview**

The human immune system evolved protecting us from physical, biological, and chemical hazards. The innate immune system evolved first and is found in simple animals. The adaptive immune system evolved where surface receptors on the white blood cells bind specifically to antigens in humans and other vertebrates.

Antigens are substances that are able to make the immune system react, resulting in antibodies formation. Antibodies are proteins produced by the presence of antigens as I mentioned previously. The antigens and the antibodies bind, resulting in increased response to the antigen. Also, this process led to the evolution of an immunological memory.

The concepts in this course is integrated with the concepts in EvoMed 101 and Mom’s Grassy Chess Academy 101. Also, this course is a continuation of PEMSAI 201. PEMSAI 201 deals with the concepts of Pathology, Evolutionary Medicine, Military Science, and Artificial Intelligence.

**PEMSAI 201 is research intensive.**

**A. Discussion Forum Activities**

**Discussion Forum Activity –**

The Global Farmer Engineers should answer the questions in the Discussion Forum. The Discussion Forum consists of two parts. The first part will be your response to the main question(s). The second part will be your response to your binary.

Answer the Discussion Forum questions for the week by posting to your binary. For Part 1, Military Checkpoint (MC) #1: Differentiate innate immunity and adaptive immunity.; Military Checkpoint (MC) #2: “Describe aging and connect aging concepts with immunity.” There is no Part 2. There is PESILAD instead. Ergo, your Part 2 is your PESILAD response.

**B. CONNECTING THE CONCEPTS**

The CONNECTING THE CONCEPTS exercises identify the need to integrate the concepts through the course. You will recognize that learning the concepts is not based upon memorization. Instead, learning the concepts is based on connecting and linking the concepts even if it seems to be of different topics. Let me explain, the CONNECTING THE CONCEPTS exercises act as the threads that unite the concepts throughout the course. You will be using the CONNECTING THE CONCEPTS exercises when you build your Binary Project Paper.

There are five concepts that you have to use in sentences every week. Connecting The Concepts exercise is a critical thinking exercise I designed, and I have been using Connecting The Concepts for 30 years now. The five concepts for this week are:

**1. Lymphocytes**

**2. Lymph Nodes**

**3. Thymus**

**4. Splenomegaly**

**5. Measles**

Post your responses by sending your sentences to your binary.

**C. The JODEL Project (30%)**

You have to write a 16-page paper on the JODEL Project. There are five components of the JODEL Project. The first component is the PESILAD (2 pages). The second component is the JODEL Plane (5 pages). The third component is the Hazards (2 pages). The fourth component is the Controls (2 pages). The fifth component is Rice Production (3 pages). The bibliography is one page. The cover page is one page. This is the 16-page report, which should be MLA formatted. The Jodel Project will be updated every week. This is an individual project. The Jodel Project is due the Week of 7/21/2025. To make the research efficient, I decided to make The Jodel Project with the original assignment. The “JODEL” Project is an assignment geared towards individual research. The Global Farmer-Engineer must create and submit an original eight-page report. The Global Farmer-Engineer will create the “JODEL” project, using the “JODEL” plane (GATU) as model. This activity follows the constructivist way of learning. However, this is an exception because all Project Papers are done collaboratively. The “JODEL” Project is an individual project. Combine this 8-page report to your 16-page paper. Your binary will give the feedback after you are done with your project.

For this week, your focus for your binary project paper is **researching the controls**. Do your own research. Use Doctor Deauna’s X.

**D. Simulations and Professional Anticipatory Tactics (SAPAT)**

The Simulations and Professional Anticipatory Tactics (SAPAT) exercises are another application of the Farmer-Engineers’ knowledge, in which the Global Farmer-Engineers will have to perform simulations on relevant PEMSAI concepts. Also, the Farmer-Engineers should apply professional anticipatory tactics. The Farmer-Engineers should use the Chess Cradle accordingly. The SAPAT exercise for this week should be correlated with Doctor Deauna’s X.

**E. Global Response and Mobilization (GRAM)**

The Global Response and Mobilization (GRAM) exercises are aligned with the objectives as presented in the syllabus. The GRAM exercises allow the Farmer-Engineers to relate PEMSAI concepts to the Farmer-Engineers response to Global Emergencies. The Global Emergencies are real world situations and problems that need preparations. Use of Engineering Control, Administrative Control, and use of Personal Protective Equipment concepts are appropriate responses. Together with Connecting The Concepts, Environmental Medicine, and “Outside the Box” Concepts, global response/s can be met. With regards to mobilization, activation of command centers can be done whenever necessary. The data for the GRAM exercise should be correlated with Doctor Deauna’s X.

**F. PESILAD**

There is a PESILAD exercise wherein the Farmer-Engineer have to research why the PESILAD is with a certain diagnosis. PESILAD stands for “Patient, Etiology, Signs and Symptoms, Impression, Laboratory, Ancillary Procedures, and Diagnosis. All pertinent data will be given. It is for the Farmer-Engineer to know the reason why the data was given. **For this week**, the daughter of Farmer-Engineer E is a 5 year-old female with rashes. She was brought by the father to the pediatrician for consultation. The pediatrician recommended that the child be brought to the Tertiary Military Hospital for further treatment and documentation. There are no other clinical cases similar to the child was present at this time. A pediatric nurse will accompany the child and the Farmer-Engineer. The patient is scheduled to be flown out immediately.

**These are the WHY questions.**

**P =** Daughter of Farmer Engineer E, 5-year old female with rashes

**E =** Extrinsic **WHY?**

**S =** Rashes, fever, cough, nasal catarrh, pharyngitis, conjunctivitis

**I** = Infectious disease **WHY?**

**L** = CBC, urinalysis, throat swab **WHY?**

**A** = X-ray **WHY?**

**D** = Measles **WHY?**

**Open Questions:** E-mail your questions at numbers115@aol.com.

Questions can be related to APEMS (Anatomy, Physiology, Evolutionary Medicine and Military Science). Questions can be pertaining to COVID and other viruses. Questions can be on how to produce rice for all. Questions can be on Mom’s Grassy Farmlands Nuclear Bunkers Rice Complexes and Universities. Finally, questions can be on Mom’s Grassy “Extension”.

Do your best!

**Professor Deauna**