

Approaching iRAT/tRAT And weekly Quizzes

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Disclaimer: The opinions expressed in this presentation are those of the individual students and do not represent those of the University of Illinois or its faculty.

These opinions are by no means the only way to approach your studies.

Step 1: Start Early

1. Sometimes material from the rest of the week will also show up in the TBL learning objectives. See if there is overlap so you can pay special attention to those points.
2. TBL almost always requires assigned reading. As this takes a longer time to digest, you must allow yourself the appropriate amount of time.

Step 2: Read Learning Objectives

1. Describe APC capture of antigen after infection and their trafficking for initiation of T-cell activation.
2. Discuss how microbial invasion induces activation and expansion of T cells in draining lymph nodes and then migration of them to infection site.
3. Understand the mechanisms (3 signals) whereby naïve T cells undergo full activation and differentiation.
4. Discuss the generation and effector functions of the major subtypes of T helper cells (Th1, Th2/Tfh, Th17, Treg) and CD8+ cytotoxic T lymphocytes (CTL).
5. Discuss mechanisms by which Th1 subset helps and enhances macrophage activation to kill ingested microbes; understand that Th1 and Th2 dominance impacts outcome of intracellular infection.
6. Describe how CD4+ Th1 cells help or license CD8+ CTL function.
7. State the mechanism by which CD8+ CTL recognize and destroy infected cells.
8. Summarize and contrast T effector subsets involving immunity against extracellular versus intracellular microbes including bacterial, virus, fungi and helminths.
9. Describe what are differences between primary and memory T-cell responses in infection/re-infection, and discuss protection principle of vaccine.

Step 3: Use supplied materials from Blackboard to fill out learning objectives

Step 4: Commit to memory

Flash cards

Concept maps

Teach back

Meet with your team Thursday afternoon/Friday morning to review material

Approach to Weekly Quizzes

- Prep for class
 - Look over the powerpoint slides and assigned pre-work for a session
 - Boards, Sketchy, Physeo, Osmosis Etc will save you time.
 - These materials are already collated and already have pre-made flash cards
 - Have the appropriate materials completed **before** class.
- Attend class
 - Either in person or through echo 360
 - Focus on the material that wasn't presented in your outside materials
 - You may want to make your own flash cards covering this material
 - Make flash cards from the relevant powerpoint slides and class materials that aren't covered in your pre-made decks
- Close Gaps
 - As you mature your flashcards, you will notice gaps in your understanding. To close these, reference the texts and Blackboard materials, or e-mail your faculty
 - Double check that you have covered your learning objectives.

Approach to Weekly Quizzes [continued]

- Make sure your OneNote (Notability, etc) is all pre-loaded with the proper class material
 - Provides an easy reference during the quiz
 - Have a “gap filling” tab for stuff that you’ve missed this week. Or stuff that you had to look up during the quiz because you didn’t know it from memory. These are topics you will have to re-learn during the weekend and/or during study week.
- Questions
 - By the end of the week, you will hopefully have been through all of your flashcards a couple times. If you have extra time, try some practice questions from Osmosis to identify areas of weekends.
- Always review
 - Always review your quiz once it has been graded. Even if you got 100%, at minimum it will give you a means for spaced review.
 - Take special note of items that were incorrect or confusing. Not these items in your “gap filling” tab.

Tips

1. Stay on top of your daily reviews
2. Decide where to spend your time on note-taking.
3. Don't spend TOO much time making flashcards.
 - a. Get someone to show you how to make flashcards quickly.
 - b. Pre-made decks (USMLE-Rx, ETC) are fairly complete

Mock tRAT

Please log into PollEv

- Douglasgrow990

Take 10 minutes to read the handout on Immune Response

Questions will be activated after we have finished reading.

Adaptive Defense against parasites is mediated by

Basophils binding to the Fab portion of IgE

Neutrophil degranulation, releasing histamine and heparin

Eosinophils binding to the Fc Portion of IgE

Cytotoxic T- Cells attracting lymphocytes to the site of the parasite

Eosinophils binding to the Fc Portion of IgA

A 30 year old sexually active man was found to be HIV positive. Which of the following describes a good immunologic prognosis for this patient

Increase in anti-HIV antibodies; increase in HIV viral load **A**

Increase in anti-HIV antibodies; decrease in HIV viral load **B**

Decrease in anti-HIV antibodies; increase in HIV viral load **C**

Decrease in anti-HIV antibodies; decrease in HIV viral load **D**

Which best supports the hygiene theory?

A child that is kept in a very clean environment and never get sick.

A surgeon that fails to follow sterile technique and whose patient gets postoperative sepsis

A man that uses IV drugs and develops tricuspid endocarditis.

A child who grows up playing on a farm that never develops any allergies.

A particular viral infection has resulted in NK cell-mediated cell destruction. What is the activity of T cells in this host?

Elevated

Decreased

unchanged.

A four year old boy presents with "yet another" infection per his mother, who is worried that something is wrong with her son that he seems to get sick so often. At different points in the last year he has presented for otitis twice, pneumonia once, gastroenteritis once, and several colds; though each time her son seems to make a normal recovery.. Deficiency in which of these would account for these symptoms:

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IgA in the serum

IgA on B cell surfaces

IgD at mucosal sites

IgD in the serum

IgA at mucosal sites

IgM in the serum

IgM on B cell surfaces

IgG at mucosal sites

IgG in the serum