


The McGraw Hill logo is positioned in the top-left corner of the page. It consists of the words "Mc", "Graw", and "Hill" stacked vertically in a white, sans-serif font, all contained within a solid red square.

**Mc  
Graw  
Hill**

A large, solid red rectangular box is positioned on the right side of the page, containing the title text. The background of the entire page is a light gray grid of 3D cubes.

# **Boards & Beyond User Guide**

**Step 1-PRECLINICAL** provides an online virtual curriculum to supplement M1 and M2 coursework and builds students' foundation in all pre-clinical subjects. It includes more than 440 videos and over 2300 USMLE-style questions, as well as progress tracking, custom quizzes & playlists, and slide PDFs.

**STEP 2-3-CLINICAL** expands students' foundation into clinical topics, including in-depth discussions of diagnosis and treatment that will help them excel during clinical rotations and on the USMLE Step 2 CK and Step 3 exams. It includes more than 260 videos and over 1300 USMLE-style questions, as well as progress tracking, custom quizzes & playlists, and slide PDFs

Step 1/Step 2  
toggle button

The screenshot shows the Boards and Beyond dashboard for a user named Alicia. At the top, there is a search bar and a navigation menu with options: Dashboard, Category, Step 1-P (highlighted with a red box), a help icon, a notification bell, and a user profile icon labeled 'AC'. Below the navigation, a welcome message reads 'Welcome back Alicia, Good Morning.' To the right is a 'My Subscriptions' link. The dashboard features several performance metrics: 'Referrals' (0% of 14670), 'Alicia's Quiz Performance' (0% correct, incorrect, omitted), 'Questions Answered' (0% of 2938), and '8 days logged in'. A 'Latest News' section contains an article titled 'Major Updates to Boards and Beyond's Musculoskeletal video library' dated May 22, 2025, with a 'Read Full Article' link. Below this is a 'Categories' section for 'Step 1 - Preclinical' with a dropdown arrow. It displays a table of categories with their respective video counts, question counts, and time spent.

Category	Videos	Questions	Time Spent	Progress
Biochemistry	28 / 1	140 / 10	9h 9m / 20m	0%
Biostats/Epi	12	63	3h 32m	0%
Cardiology	47	475	16h 13m	0%
Cell Biology	14 / 1	64 / 10	3h 23m /	0%

## Navigating the homepage

The screenshot shows the McGraw Hill Boards and Beyond homepage. At the top, there is a navigation bar with a search bar labeled "Search for videos" and a dropdown menu set to "All". Below the navigation bar, the user is greeted with "Welcome back Alicia, Good Morning." and "My Subscriptions". The main content area features several widgets: "Referrals" (0% of 16090), "Alicia's Quiz Performance" (0% with a legend for Correct, Incorrect, and Omitted), "Questions Answered" (0% of 2938), and "8 days logged in". A "Latest News" section highlights "Major Updates to Boards and Beyond's Musc..." dated May 22, 2025. Below this is a "Categories" section for "Step 1 - Preclinical" with a summary of 22 documents, 476 questions, 2938 quizzes, and 141h 30m of content. A table lists categories: Biochemistry, Biostats/Epi, Cardiology, and Cell Biology, each with associated document counts, question counts, quiz counts, and time estimates.

Category	Documents	Questions	Quizzes	Time	Progress
Biochemistry	28 / 1	140 / 10	9h 9m / 20m	0%	
Biostats/Epi	12	63	3h 32m	0%	
Cardiology	47	475	16h 13m	0%	
Cell Biology	14 / 1	54 / 10	3h 23m /	0%	

Navigating content by search

Search by word or phrase

Navigating content by categories

Click on any category to begin learning

Explore all quizzes

Navigate to the quizzes page to view all available quizzes and track your progress

# Quick review of progress


The dashboard displays a user's progress across different categories. At the top, there is a search bar and navigation options like 'Dashboard', 'Category', and 'Step 1-P'. The main content area is divided into several sections:

- Welcome back Alicia, Good Morning.** (Personalized greeting)
- My Subscriptions** (Link to subscriptions)
- Referrals:** 0% of 16090
- Questions Answered:** 0% of 2938
- Alicia's Quiz Performance:** 0% (Correct, Incorrect, Omitted)
- 8 days logged in** (Hourglass icon)
- Latest News:** Major Updates to Boards and Beyond's Musculoskeletal video library (May 22, 2025)
- Categories:** Step 1 - Preclinical (22 items, 476 questions, 2938 questions, 141h 30m time, 0% progress)
- Biochemistry:** 28 / 1 items, 140 / 10 questions, 9h 9m / 20m time, 0% progress
- Biostats/Epi:** 12 items, 63 questions, 3h 32m time, 0% progress
- Cardiology:** 47 items, 475 questions, 16h 13m time, 0% progress
- Cell Biology:** 14 / 1 items, 64 / 10 questions, 3h 23m / time, 0% progress

A red box highlights the Biochemistry category progress details, and a red line connects this box to the text 'At a glance, review your progress of each category' on the left.

At a glance, review your progress of each category

Members > Step 1 - Preclinical > Biochemistry Time spent 0m [Reset](#)



**Biochemistry**

6 Sub-categories  
140 Questions  
10 Related Videos Questions

28 Videos  
9h 9m Duration  
1 Related Videos





140

























[Slides \(pdf\)](#) [Book \(pdf\)](#) [Checklist](#)

0/28  
Lessons Completed

0/140  
Questions Answered

0%  
Quiz Performance

Sub-categories [Reset All](#)    

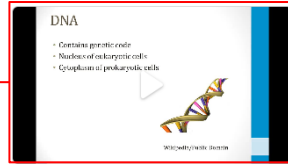
01. Molecular Biochemistry	 3	 13	 54m	
02. Metabolism	 14	 68	 4h 13m	
03. Amino Acids	 4	 19	 1h 20m	
04. Vitamins	 3	 15	 1h 15m	
05. Lipids	 3	 18	 54m	
06. Other Topics	 1	 7	 31m	

Click to explore the lessons and content in each sub-category

# Videos

Click on the video to navigate to the video landing page

## 01. Molecular Biochemistry



### DNA Structure

12m

Last Modified: Jul 4, 2024

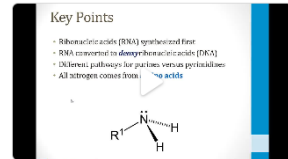
First Aid 2021: 34, 35 · First Aid 2022: 32, 33 · First Aid 2023: 36, 37, 38, 32 · First Aid 2024: 32, 33, 35, 36, 37, 38 · First Aid 2025: 32-38

**FIRST AID Forward** · Chromatin structure

This video provides a solid foundation in DNA (Deoxyribonucleic acid) structure and function. You will gain a deep understanding of DNA components, methylation, and packaging, which will enhance your ability to comprehend genetic diseases and potential treatments. By learning about epigenetic phenomena like histone acetylation and deacetylation, you will be equipped to understand the basis of drug-induced lupus and the therapeutic potential of histone deacetylase inhibitors.

Video Quiz <sup>2</sup>

Video Index <sup>49</sup>



### Purine Metabolism

18m

Last Modified: Jul 3, 2024

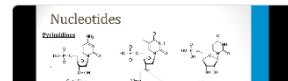
First Aid 2021: 36, 37, 120, 204 · First Aid 2022: 34, 35, 119, 201 · First Aid 2023: 34, 71, 33, 35, 473 · First Aid 2024: 33, 34, 35, 71, 118, 119 · First Aid 2025: 33, 34, 35, 71, 119

**FIRST AID Forward** · De novo pyrimidine and purine synthesis · Purine salvage deficiencies

This video on purine metabolism will help you learn how the body synthesizes, salvages, and breaks down these crucial building blocks of DNA and RNA. By mastering these concepts, you will be better prepared to tackle clinical scenarios related to disorders of purine metabolism, such as gout and Lesch-Nyhan syndrome. You will also understand the pharmacology behind drugs like allopurinol, 6-mercaptopurine, and azathioprine that target this pathway.

Video Quiz <sup>6</sup>

Video Index <sup>43</sup>



### Pyrimidine Metabolism

22m

Last Modified: Jul 3, 2024

### DNA Structure

Videos > Step 1 - Preclinical > Biochemistry > Molecular Biochemistry > DNA Structure

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Please do not illegally share or distribute these materials

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Transcript

00:05 Instructor  
Hi everybody, and welcome to our module on DNA structure. In this module, we'll review some basic concepts of DNA that you should all be familiar with and basically the point of this module is to set the stage so we can talk about the biochemical synthesis of purines and pyrimidines. So DNA, as you know, contains our genetic code and it's found in the nucleus of eukaryotic cells, it's found in the cytoplasm of prokaryotic cells like bacteria.

00:29 Instructor  
DNA, as you all should know, has two complimentary strands and I'm drawing a line through the two strands on this picture of DNA on the screen. Each strand is made up of a series of building blocks called a nucleotide. This is

0 0m

2

With each video, you'll be able to:

- Download the video as PDF
- Mark as watched
- Mark as favorite
- Mark as completed
- Mark as Anki
- Work on the relevant quizzes
- Add video to playlist
- Add Notes

# Quizzes

## Quizzes

Members > Quizzes

Reset Quiz History
Create Custom Quiz

0 2,000 4,000

● Total Questions ● Answered

NA

**Alicia's Quiz Performance**

● Correct ● Incorrect ● Omitted

43.4%

**Quiz Performance (All)**

● Correct ● Incorrect ● Omitted

0 2,000

● Used ● Unused

**Quiz Category List** ⓘ Step 1 - Preclinical ▾

\*This statistic only includes questions for which an answer was provided

	Questions	Used*	Answered	Correct*	% Correct	% All Users*	
<div style="display: flex; align-items: center; gap: 5px;"> <span>Anesthesia (NEW)</span> </div>	35	0	0	0	NA	67.5%	<div style="border: 2px solid red; padding: 2px; display: inline-block; color: white; background-color: #007bff;">Take Quiz</div> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block; background-color: #f0f0f0;">Reset</div>
	23	0	0	0	NA	65.9%	<div style="padding: 2px; display: inline-block; color: white; background-color: #007bff;">Take Quiz</div> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block; background-color: #f0f0f0;">Reset</div>
	41	0	0	0	NA	72.9%	<div style="padding: 2px; display: inline-block; color: white; background-color: #007bff;">Take Quiz</div> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block; background-color: #f0f0f0;">Reset</div>
	140	0	0	0	NA	62.5%	<div style="padding: 2px; display: inline-block; color: white; background-color: #007bff;">Take Quiz</div> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block; background-color: #f0f0f0;">Reset</div>

Create a Custom Quiz or explore from the list of quizzes available by category.

**Timed Mode -**  
Timed mode creates a time limit for quiz of 1.5 minutes per question

---

**Tutor Mode -**  
Tutor mode shows answers and explanations during quiz after each answer choice is made

Timed or tutor mode (or both) can be enabled for the quizzes.

Press Enter or Space to skip the header menu

1

2 **Item 3 of 5** i

3 Question ID : 30 Mark

4 Previous Next

5 Instructions Lab Values Calculator A A A

A medical student in good general health volunteers for a physiology study. The student exercises on a treadmill achieving 10 METs of activity. At peak exercise, total peripheral resistance falls compared with the resting state. Which of the following is a mediator of this change?

(A) Acetylcholine

(B) Adenosine

(C) Histamine

(D) Prostaglandin E2

Submit

Total Time Taken 00:00:25 Statistics

**Timed Mode -**  
Timed mode creates a time limit for quiz of 1.5 minutes per question

Item 3 of 5    Question ID : 30    Mark    Previous    Next    Instructions    Lab Values    Calculator    A    A    A

<input checked="" type="radio"/> (B) Adenosine	72.64%
<input type="radio"/> Histamine	3.22%
<input type="radio"/> Prostaglandin E2	11.41%

✔ **Correct Answer**

📊 **72.64%**  
Answered Correctly

🕒 **00:00:24**  
Time Spent

📅 **Jul 17, 2020**  
Last Updated

**Explanation**

[Cardiology](#) > [Anatomy and Physiology](#) > [CV Response to Exercise](#)

**Answer B (correct answer):** During exercise, **skeletal muscle blood flow increases significantly** ("exercise-induced hyperemia"). This increase in blood flow is driven by **local factors in skeletal muscle** – it is not a coordinated response by the nervous system. Numerous local substances produced by skeletal muscle tissue cause vasodilation which increases blood flow. Of these, three that are worth remembering for your exams include **adenosine**, potassium, and lactic acid. There are many others.

**Answer A (incorrect answer):** Acetylcholine is a neurotransmitter used by the autonomic nervous systems. Acetylcholine can indirectly cause vasodilation – this is how the parasympathetic system works. To cause vasodilation, acetylcholine induces nitric oxide release from vascular endothelium. This mechanism is not critical to the fall in resistance with exercise.

**Answer C (incorrect answer):** Histamine is released by mast cells as part of hypersensitivity (allergic) reactions.

**Answer D (incorrect answer):** Prostaglandin E2 is important in utero for maintaining patency of the ductus arteriosus. It also has a role in causing fever with infection, in addition to other effects.

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Total Time Taken 00:00:44    Statistics    ● ● ● ● ●

Feedback    Suspend    End Quiz

**Tutor Mode -**  
Tutor mode shows answers and explanations during quiz after each answer choice is made



## Support

Click on the Help icon to navigate to our [FAQs](#)

or contact us directly from this page  
[Boards and Beyond | Contact Us](#)

More resources on Access User Center: [Boards & Beyond | Access User Center](#)

The screenshot shows the Boards and Beyond (B&B) user interface. At the top, there is a search bar for videos and a navigation menu with options like Dashboard, Category, and Step 1-P. A user profile icon labeled 'AC' is visible in the top right corner. Below the navigation, a welcome message reads 'Welcome back Alicia, Good Morning.' The dashboard features several performance metrics: 'Referrals' (0% of 14090), 'Questions Answered' (0% of 2438), 'Alicia's Quiz Performance' (0% correct, 0% incorrect, 0% omitted), and '8 days logged in'. A 'Latest News' section highlights 'Major Updates to Boards and Beyond's Musc...' dated May 22, 2025. Below this, a 'Categories' section shows 'Step 1 - Preclinical' with a list of topics: 'Anesthesia (NEW)' (4 items, 35 questions, 1h 15m duration, 0% progress) and 'Basic Pharmacology' (5 items, 23 questions, 1h 25m duration, 0% progress). At the bottom, there is a 'FAQ' section with a breadcrumb trail 'Home > FAQ'.

## Frequently Asked Questions

To provide feedback and suggestions, or if your question isn't answered here, please [contact us directly](#)

The screenshot shows the 'Frequently Asked Questions' search interface. It features a search bar labeled 'Search FAQs' with a magnifying glass icon. Below the search bar is a horizontal navigation menu with several categories: 'General' (highlighted in blue), 'Products', 'B&B + First Aid Forward', 'Billing', 'Technical', 'Group Discount Offer', and 'Admin'. The 'General' category is currently selected.