

# Neuroanatomy Neuroscience Exam 2004

# 4

## Neuroscience Exam #4

Author: David Corey

Instructor @MIT

Published 2014

# Create, Share, and Discover Online Quizzes.

QuizOver.com is an intuitive and powerful online quiz creator. [learn more](#)

Join QuizOver.com



## How to Analyze Stocks

By Yasser Ibrahim

1 month ago  
12 Responses

© iStock: Thomson Moter



## Pre Employment English

By Katharina jennifer N

5 months ago  
19 Responses

© iStock: Albin



## Lean Startup Quiz

By Yasser Ibrahim

2 months ago  
16 Responses

© iStock: Gekwotwe Chua

Powered by QuizOver.com

The Leading Online Quiz & Exam Creator

Create, Share and Discover Quizzes & Exams

<http://www.quizover.com>

## Disclaimer

All services and content of QuizOver.com are provided under QuizOver.com terms of use on an "as is" basis, without warranty of any kind, either expressed or implied, including, without limitation, warranties that the provided services and content are free of defects, merchantable, fit for a particular purpose or non-infringing.

The entire risk as to the quality and performance of the provided services and content is with you.

In no event shall QuizOver.com be liable for any damages whatsoever arising out of or in connection with the use or performance of the services.

Should any provided services and content prove defective in any respect, you (not the initial developer, author or any other contributor) assume the cost of any necessary servicing, repair or correction.

This disclaimer of warranty constitutes an essential part of these "terms of use".

No use of any services and content of QuizOver.com is authorized hereunder except under this disclaimer.

The detailed and up to date "terms of use" of QuizOver.com can be found under:

<http://www.QuizOver.com/public/termsOfUse.xhtml>



## eBook Content License

Corey, David. HST.131 Introduction to Neuroscience, Fall 2005. (MIT OpenCourseWare: Massachusetts Institute of Technology), <http://ocw.mit.edu/courses/health-sciences-and-technology/hst-131-introduction-to-neuroscience-fall-2005> (Accessed 12 Apr, 2014). License: Creative Commons BY-NC-SA

### Creative Commons License

Attribution-NonCommercial-NoDerivs 3.0 Unported (CC BY-NC-ND 3.0)

<http://creativecommons.org/licenses/by-nc-nd/3.0/>

You are free to:

Share: copy and redistribute the material in any medium or format

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

**Attribution:** You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

**NonCommercial:** You may not use the material for commercial purposes.

**NoDerivatives:** If you remix, transform, or build upon the material, you may not distribute the modified material.

**No additional restrictions:** You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

# Table of Contents

Quiz Permalink: <http://www.quizover.com/question/introduction-to-neuroscience-exam-4-hst-131-by-dr-david-corey-mit>

Author Profile: <http://www.quizover.com/user/profile/david.corey>

## 1. Neuroscience Exam 2004 4

- Electrophysiology
- Neuroanatomy
- Sensory and Motor Systems
- Development and Cognitive Disorders

## 4. Chapter: Electrophysiology

### 1. Electrophysiology Questions

#### 4.1.1. (7 pt) Long-term potentiation at the CA3-to-CA1 synapse in the hipp...

Author: David Corey

(7 pt) Long-term potentiation at the CA3-to-CA1 synapse in the hippocampus has these characteristics (circle all that apply):

Please choose all the answers that apply:

- requires extracellular Ca<sup>2+</sup>
- requires postsynaptic depolarization
- involves activation of protein kinase A
- involves insertion of new AMPA receptors in the presynaptic membrane
- is blocked by botulinum toxin in the postsynaptic cytoplasm
- shares essentially the same mechanism at all synapses that use glutamate receptors
- is mediated by binding of anandamide at CB1 receptors

Check the answer of this question online at QuizOver.com:

Question: [7 pt Long-term potentiation at the CA3-to by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/7-pt-long-term-potentialtion-at-the-ca3-to-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/7-pt-long-term-potentialtion-at-the-ca3-to-by-dr-david-corey-mit?pdf=1505>

#### 4.1.2. \_\_\_ nicotine

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_ nicotine

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [nicotine A great many psychoactive drugs affect proteins by Dr. David](#)

Flashcards:

<http://www.quizover.com/flashcards/nicotine-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/nicotine-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>



### 4.1.3. \_\_\_morphine

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_morphine

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [morphine A great many psychoactive drugs affect proteins by Dr. David](#)

Flashcards:

<http://www.quizover.com/flashcards/morphine-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/morphine-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

#### 4.1.4. \_\_\_ caffeine

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_ caffeine

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [caffeine A great many psychoactive drugs affect proteins by Dr. David](#)

Flashcards:

<http://www.quizover.com/flashcards/caffeine-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/caffeine-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

#### 4.1.5. \_\_\_ LSD

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_ LSD

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [LSD A great many psychoactive drugs affect proteins by Dr. David](#)

Flashcards:

<http://www.quizover.com/flashcards/lsd-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/lsd-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

#### 4.1.6. \_\_\_ tetrahydrocannabinol

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_ tetrahydrocannabinol

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [tetrahydrocannabinol A great many psychoactive drugs affect proteins](http://www.quizover.com/question/tetrahydrocannabinol-a-great-many-psychoactive-drugs-affect-proteins?pdf=1505)

Flashcards:

<http://www.quizover.com/flashcards/tetrahydrocannabinol-a-great-many-psychoactive-drugs-affect-proteins?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/tetrahydrocannabinol-a-great-many-psychoactive-drugs-affect-proteins?pdf=1505>

#### 4.1.7. \_\_\_ cocaine

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_ cocaine

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [cocaine A great many psychoactive drugs affect proteins by Dr. David](#)

Flashcards:

<http://www.quizover.com/flashcards/cocaine-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/cocaine-a-great-many-psychoactive-drugs-affect-proteins-by-dr-david?pdf=1505>

#### 4.1.8. \_\_\_ reserpine

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_ reserpine

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [reserpine A great many psychoactive drugs affect proteins by Dr.](#)

Flashcards:

<http://www.quizover.com/flashcards/reserpine-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/reserpine-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505>



#### 4.1.9. \_\_\_ amphetamines

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_ amphetamines

Please choose all the answers that apply:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [amphetamines A great many psychoactive drugs affect proteins by Dr](#)

Flashcards:

<http://www.quizover.com/flashcards/amphetamines-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/amphetamines-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505>

#### 4.1.10. \_\_\_chlorpromazine

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_chlorpromazine

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [chlorpromazine A great many psychoactive drugs affect proteins by](#)

Flashcards:

<http://www.quizover.com/flashcards/chlorpromazine-a-great-many-psychoactive-drugs-affect-proteins-by?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/chlorpromazine-a-great-many-psychoactive-drugs-affect-proteins-by?pdf=1505>

#### 4.1.11. \_\_\_barbiturates

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_barbiturates

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [barbiturates A great many psychoactive drugs affect proteins by Dr](#)

Flashcards:

<http://www.quizover.com/flashcards/barbiturates-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/barbiturates-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505>

#### 4.1.12. \_\_\_benzodiazepines

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

\_\_\_benzodiazepines

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [benzodiazepines A great many psychoactive drugs affect proteins by](#)

Flashcards:

<http://www.quizover.com/flashcards/benzodiazepines-a-great-many-psychoactive-drugs-affect-proteins-by?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/benzodiazepines-a-great-many-psychoactive-drugs-affect-proteins-by?pdf=1505>

#### 4.1.13. \_\_\_imipramine

Author: David Corey

A great many psychoactive drugs affect proteins associated with synaptic transmission.

Match the drug or class of drugs with its target(s).

For each of the following choose the correct receptor(s). Your choices are

\_\_\_imipramine

Please choose only one answer:

- dopamine D2 receptors
- Na<sup>+</sup>/dopamine cotransporters
- 5HT transporters
- serotonin receptors
- GABAA receptors
- adenosine receptors
- vesicular H<sup>+</sup>/dopamine antiporters
- monoamine oxidase
- μ-opiate receptors
- nACh receptors
- CB1 receptors
- NMDA receptors

Check the answer of this question online at QuizOver.com:

Question: [imipramine A great many psychoactive drugs affect proteins by Dr](http://www.quizover.com/question/imipramine-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505)

Flashcards:

<http://www.quizover.com/flashcards/imipramine-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/imipramine-a-great-many-psychoactive-drugs-affect-proteins-by-dr?pdf=1505>

4.1.14. mediates the fastest excitatory transmission \_\_\_\_\_

Author: David Corey

mediates the fastest excitatory transmission \_\_\_\_\_

Please choose only one answer:

- AMPA receptor
- NMDA receptor
- metabotropic glutamate receptor

Check the answer of this question online at QuizOver.com:

Question: [mediates the fastest excitatory transmission by Dr. David Corey](#)

Flashcards:

<http://www.quizover.com/flashcards/mediates-the-fastest-excitatory-transmission-by-dr-david-corey?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/mediates-the-fastest-excitatory-transmission-by-dr-david-corey?pdf=1505>



4.1.15. has seven transmembrane domains \_\_\_\_\_

Author: David Corey

has seven transmembrane domains \_\_\_\_\_

Please choose only one answer:

- AMPA receptor
- NMDA receptor
- metabotropic glutamate receptor

Check the answer of this question online at QuizOver.com:

Question: [has seven transmembrane domains by Dr. David Corey @MIT Introduction](#)

Flashcards:

<http://www.quizover.com/flashcards/has-seven-transmembrane-domains-by-dr-david-corey-mit-introduction?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/has-seven-transmembrane-domains-by-dr-david-corey-mit-introduction?pdf=1505>

4.1.16. is blocked by extracellular Mg+2 \_\_\_\_\_

Author: David Corey

is blocked by extracellular Mg+2 \_\_\_\_\_

Please choose only one answer:

- AMPA receptor
- NMDA receptor
- metabotropic glutamate receptor

Check the answer of this question online at QuizOver.com:

Question: [is blocked by extracellular Mg 2 Dr. David Corey @MIT Introduction](http://www.quizover.com/question/is-blocked-by-extracellular-mg-2-dr-david-corey-mit-introduction?pdf=1505)

Flashcards:

<http://www.quizover.com/flashcards/is-blocked-by-extracellular-mg-2-dr-david-corey-mit-introduction?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/is-blocked-by-extracellular-mg-2-dr-david-corey-mit-introduction?pdf=1505>

4.1.17. is activated by glutamate \_\_\_\_\_

Author: David Corey

is activated by glutamate \_\_\_\_\_

Please choose all the answers that apply:

- AMPA receptor
- NMDA receptor
- metabotropic glutamate receptor

Check the answer of this question online at QuizOver.com:

Question: [is activated by glutamate Dr. David Corey @MIT Introduction to Neuroscience](#)

Flashcards:

<http://www.quizover.com/flashcards/is-activated-by-glutamate-dr-david-corey-mit-introduction-to-neuroscie?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/is-activated-by-glutamate-dr-david-corey-mit-introduction-to-neuroscie?pdf=1505>

#### 4.1.18. associates with G-proteins \_\_\_\_\_

Author: David Corey

associates with G-proteins \_\_\_\_\_

Please choose only one answer:

- AMPA receptor
- NMDA receptor
- metabotropic glutamate receptor

Check the answer of this question online at QuizOver.com:

Question: [associates with G-proteins by Dr. David Corey @MIT Introduction to](#)

Flashcards:

<http://www.quizover.com/flashcards/associates-with-g-proteins-by-dr-david-corey-mit-introduction-to?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/associates-with-g-proteins-by-dr-david-corey-mit-introduction-to?pdf=1505>

#### 4.1.19. variability in function caused by RNA editing \_\_\_\_\_

Author: David Corey

variability in function caused by RNA editing \_\_\_\_\_

Please choose only one answer:

- AMPA receptor
- NMDA receptor
- metabotropic glutamate receptor

Check the answer of this question online at QuizOver.com:

Question: [variability in function caused by RNA editing Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/variability-in-function-caused-by-rna-editing-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/variability-in-function-caused-by-rna-editing-dr-david-corey-mit?pdf=1505>

#### 4.1.20. (4 pt) Sketch the action potential after the manipulations describe...

Author: David Corey

(4 pt) Sketch the action potential after the manipulations described below.

A control trace is already sketched in each panel.

The ionic conditions are given below

$[K^+]_{in} = 140 \text{ mM}$   $[K^+]_{out} = 4 \text{ mM}$

$[Na^+]_{in} = 10 \text{ mM}$   $[Na^+]_{out} = 140 \text{ mM}$

- The sodium channels have a mutation which slows inactivation.
- Enough TTX is added to block about half of the sodium channels.
- The extracellular potassium concentration is increased to 6 mM.
- The extracellular sodium concentration is increased to 150 mM.

Check the answer of this question online at QuizOver.com:

Question: [4 pt Sketch the action potential after the by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/4-pt-sketch-the-action-potential-after-the-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/4-pt-sketch-the-action-potential-after-the-by-dr-david-corey-mit?pdf=1505>



#### 4.1.21. Which of these are true of vesicle release?

Author: David Corey

Which of these are true of vesicle release?

Please choose all the answers that apply:

- Cholera toxin and pertussis toxin inhibit neurotransmission by cleaving proteins of the SNARE complex.
- Synaptobrevin is the  $\text{Ca}^{2+}$  sensor triggered by  $\text{Ca}^{2+}$  influx through voltage-gated calcium channels.
- At a typical presynaptic terminal in the CNS, the readily releasable pool of vesicles numbers only 100-200.
- $\text{Ca}^{2+}$  accumulation during multiple presynaptic action potentials causes facilitation of transmitter release.
- Presynaptic G-protein coupled receptors can inhibit transmitter release both by inhibiting voltage-gated  $\text{Ca}^{2+}$  channels and by activating potassium channels.

Check the answer of this question online at QuizOver.com:

Question: [Which of these are true of vesicle release by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/which-of-these-are-true-of-vesicle-release-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/which-of-these-are-true-of-vesicle-release-by-dr-david-corey-mit?pdf=1505>

## 4. Chapter: Neuroanatomy

### 1. Neuroanatomy Questions

4.1.1. (5 pt) Which of the following structures are CONTRALATERAL from the...

Author: David Corey

(5 pt) Which of the following structures are CONTRALATERAL from the most relevant area of cerebral cortex?

Please choose only one answer:

- Medial lemniscus
- Lateral lemniscus
- Red nucleus
- Dentate nucleus
- Dentate gyrus

Check the answer of this question online at QuizOver.com:

Question: [5 pt Which of the following structures are by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-which-of-the-following-structures-are-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-which-of-the-following-structures-are-by-dr-david-corey-mit?pdf=1505>

4.1.2. (5 pt) Which one of the following structures does not belong in thi...

Author: David Corey

(5 pt) Which one of the following structures does not belong in this group?

Please choose only one answer:

- Nucleus cuneatus
- Nucleus of the spinal tract of V
- Mesencephalic nucleus of V
- Dorsal cochlear nucleus
- Olfactory bulb

Check the answer of this question online at QuizOver.com:

Question: [5 pt Which one of the following structures by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-which-one-of-the-following-structures-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-which-one-of-the-following-structures-by-dr-david-corey-mit?pdf=1505>

#### 4.1.3. (5 pt) You are examining a brain that has been cut in the sagittal ...

Author: David Corey

(5 pt) You are examining a brain that has been cut in the sagittal plane.

Which of the following combinations of structures are you most likely to see on a single slice?

Please choose only one answer:

- Oculomotor nucleus, trochlear nucleus, facial nucleus
- Primary visual cortex, primary auditory cortex, primary motor cortex for the arm
- Dentate nucleus, septal nucleus, putamen
- Nucleus gracilus, hypoglossal nucleus, mamillary body
- Anterior nucleus of the thalamus, inferior colliculus, middle cerebellar peduncle

Check the answer of this question online at QuizOver.com:

Question: [5 pt You are examining a brain that has by Dr. David Corey @MIT Introduction](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-you-are-examining-a-brain-that-has-by-dr-david-corey-mit-introduc?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-you-are-examining-a-brain-that-has-by-dr-david-corey-mit-introduc?pdf=1505>

4.1.4. (5 pt) Which of the following combinations of structures would be i...

Author: David Corey

(5 pt) Which of the following combinations of structures would be identified by staining for choline acetyl transferase (ChAT)?

Please choose only one answer:

- Upper motor neurons & lower motor neurons
- Trochlear nucleus and Edinger-Westphal nucleus
- Anterior horn cells and nucleus of Clarke's column
- Substantia nigra, pars compacta and raphe nuclei
- Substantia nigra, pars reticulata and ciliary ganglion neurons

Check the answer of this question online at QuizOver.com:

Question: [5 pt Which of the following combinations by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-which-of-the-following-combinations-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-which-of-the-following-combinations-by-dr-david-corey-mit?pdf=1505>

4.1.5. (5 pt) Which of the following statements is the most accurate?

Author: David Corey

(5 pt) Which of the following statements is the most accurate?

Please choose only one answer:

- Circadian rhythms depend on hypothalamic synthesis of melatonin
- The posterior limb of the internal capsule separates thalamus from hypothalamus
- The medial longitudinal fasciculus carries information from the hypothalamus to the brainstem
- The stria terminalis is a bidirectional connection between the hypothalamus and the amygdala
- Activity in the most anteromedial hypothalamus is associated with stress responses

Check the answer of this question online at QuizOver.com:

Question: [5 pt Which of the following statements is by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-which-of-the-following-statements-is-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-which-of-the-following-statements-is-by-dr-david-corey-mit?pdf=1505>

## 4. Chapter: Sensory and Motor Systems

### 1. Sensory and Motor Systems Questions



#### 4.1.1. (6 pt) The receptive field of a photoreceptor can be defined in ter...

Author: David Corey

(6 pt) The receptive field of a photoreceptor can be defined in terms of color and position of an object in space.

For these various cells in the ascending auditory pathway, describe in a few words what characteristics define their receptive fields:

saccular hair cell

cochlear inner hair cell

spiral ganglion neuron

lateral superior olive neuron

medial superior olive neuron

primary auditory cortex neuron

- saccular hair cell: direction of acceleration (or gravity)
- cochlear inner hair cell: auditory frequency
- spiral ganglion neuron: auditory frequency (and intensity)
- lateral superior olive neuron: loudness difference between the two ears
- medial superior olive neuron: arrival time difference between the two ears
- primary auditory cortex neuron: frequencies and duration of sound;

Check the answer of this question online at QuizOver.com:

Question: [6 pt The receptive field of a photoreceptor by Dr. David Corey @MIT](http://www.quizover.com/question/6-pt-the-receptive-field-of-a-photoreceptor-by-dr-david-corey-mit?pdf=1505)

Flashcards:

<http://www.quizover.com/flashcards/6-pt-the-receptive-field-of-a-photoreceptor-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/6-pt-the-receptive-field-of-a-photoreceptor-by-dr-david-corey-mit?pdf=1505>

4.1.2. (5 pt) Circle all the following that are true about the retina.

Author: David Corey

(5 pt) Circle all the following that are true about the retina.

Please choose all the answers that apply:

- On average, more rods than cones converge onto a single bipolar cell.
- The photoreceptors are nurtured by blood vessels that enter the eye via the optic nerve.
- ON-bipolar cells increase their rate of firing action potentials in response to light.
- The glutamatergic synapses between photoreceptors and OFF-bipolar cells are excitatory.
- Horizontal cells mediate surround inhibition by synapsing onto surrounding ganglion cells.

Check the answer of this question online at QuizOver.com:

Question: [5 pt Circle all the following that are true by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-circle-all-the-following-that-are-true-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-circle-all-the-following-that-are-true-by-dr-david-corey-mit?pdf=1505>

### 4.1.3. Reponds best to input from both eyes

Author: David Corey

(4 pt) When making extracellular recordings from single cells in the cat visual system, in the style of Hubel and Wiesel, you will find cells with different properties depending on where your electrode is in the brain.

Check all the boxes appropriate to indicate which cell types could have the properties listed on the left.

Reponds best to input from both eyes

Please choose all the answers that apply:

- Parvocellular LGN cell
- Magnocellular LGN cell
- Simple cortical cell
- Complex cortical cell

Check the answer of this question online at QuizOver.com:

Question: [Reponds best to input from both eyes 4 pt When making extracellular](#)

Flashcards:

<http://www.quizover.com/flashcards/reponds-best-to-input-from-both-eyes-4-pt-when-making-extracellular?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/reponds-best-to-input-from-both-eyes-4-pt-when-making-extracellular?pdf=1505>

#### 4.1.4. responds best to inputs from one eye only

Author: David Corey

(4 pt) When making extracellular recordings from single cells in the cat visual system, in the style of Hubel and Wiesel, you will find cells with different properties depending on where your electrode is in the brain.

Check all the boxes appropriate to indicate which cell types could have the properties listed on the left.

responds best to inputs from one eye only

Please choose all the answers that apply:

- Parvocellular LGN cell
- Magnocellular LGN cell
- Simple cortical cell
- Complex cortical cell

Check the answer of this question online at QuizOver.com:

Question: [responds best to inputs from one eye only 4 pt When making extracellular](#)

Flashcards:

<http://www.quizover.com/flashcards/responds-best-to-inputs-from-one-eye-only-4-pt-when-making-extracellul?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/responds-best-to-inputs-from-one-eye-only-4-pt-when-making-extracellul?pdf=1505>

#### 4.1.5. receptive field is ON-center/OFF-surround

Author: David Corey

(4 pt) When making extracellular recordings from single cells in the cat visual system, in the style of Hubel and Wiesel, you will find cells with different properties depending on where your electrode is in the brain.

Check all the boxes appropriate to indicate which cell types could have the properties listed on the left.

receptive field is ON-center/OFF-surround

Please choose all the answers that apply:

- Parvocellular LGN cell
- Magnocellular LGN cell
- Simple cortical cell
- Complex cortical cell

Check the answer of this question online at QuizOver.com:

Question: [receptive field is ON-center/OFF-surround 4 pt When making extracellular](#)

Flashcards:

<http://www.quizover.com/flashcards/receptive-field-is-on-center-off-surround-4-pt-when-making-extracellul?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/receptive-field-is-on-center-off-surround-4-pt-when-making-extracellul?pdf=1505>

#### 4.1.6. responds best to oriented stimuli (bar at an angle)

Author: David Corey

(4 pt) When making extracellular recordings from single cells in the cat visual system, in the style of Hubel and Wiesel, you will find cells with different properties depending on where your electrode is in the brain.

Check all the boxes appropriate to indicate which cell types could have the properties listed on the left.

responds best to oriented stimuli (bar at an angle)

Please choose all the answers that apply:

- Parvocellular LGN cell
- Magnocellular LGN cell
- Simple cortical cell
- Complex cortical cell

Check the answer of this question online at QuizOver.com:

Question: [responds best to oriented stimuli bar at 4 pt When making extracellular](#)

Flashcards:

<http://www.quizover.com/flashcards/responds-best-to-oriented-stimuli-bar-at-4-pt-when-making-extracellula?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/responds-best-to-oriented-stimuli-bar-at-4-pt-when-making-extracellula?pdf=1505>

4.1.7. (6 pt) Indicate all the following that are true about the cerebellum:

Author: David Corey

(6 pt) Indicate all the following that are true about the cerebellum:

Please choose all the answers that apply:

- Across the different functional areas of the cerebellum, the cortical structure is remarkably similar.
- Phylogenetically speaking, the fastigial nucleus is the oldest part of the cerebellum.
- The spinocerebellum consists of the vermis and intermediate zones, plus their deep output nuclei.
- The interposed nuclei affect distal motor control on the same side of the body.
- Most of the input to the most lateral parts of the cerebellar hemispheres comes directly from the cerebral cortex.
- The leading theory on how the cerebellum operates is that complex spikes provide an "error signal" used to modify parallel fiber input through long-term depression of the parallel fiber-Purkinje cell synapse.

Check the answer of this question online at QuizOver.com:

Question: [6 pt Indicate all the following that are by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/6-pt-indicate-all-the-following-that-are-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/6-pt-indicate-all-the-following-that-are-by-dr-david-corey-mit?pdf=1505>

#### 4.1.8. (4 pt) Describe one pharmacological treatment and one surgical trea...

Author: David Corey

(4 pt) Describe one pharmacological treatment and one surgical treatment for Parkinsonism.

What are they and how are they thought to work?

- Pharm treatments should center on dopamine levels  
L-Dopa, MAOIs, or DopaR agonists acting to relieve the loss of dopaminergic transmission.  
Surgical treatments I see as being either deep brain stimulation or a pallidotomy to relieve the overactivity of the basal ganglia's indirect pathway.

Check the answer of this question online at QuizOver.com:

Question: [4 pt Describe one pharmacological treatment by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/4-pt-describe-one-pharmacological-treatment-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/4-pt-describe-one-pharmacological-treatment-by-dr-david-corey-mit?pdf=1505>



## 4. Chapter: Development and Cognitive Disorders

### 1. Development and Cognitive Disorders Questions

#### 4.1.1. Location of sperm entry

Author: David Corey

(6 pt) Match the following (refers to Xenopus development):

Location of sperm entry

Please choose only one answer:

- Egg cytoplasm
- Animal pole
- Vegetal pole
- Entry of sperm
- Dorsal lip of the blastopore
- Blastula
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Location of sperm entry 6 pt Match the following refers to Xenopus](#)

Flashcards:

<http://www.quizover.com/flashcards/location-of-sperm-entry-6-pt-match-the-following-refers-to-xenopus?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/location-of-sperm-entry-6-pt-match-the-following-refers-to-xenopus?pdf=1505>

#### 4.1.2. Will become endoderm

Author: David Corey

(6 pt) Match the following (refers to Xenopus development):

Will become endoderm

Please choose only one answer:

- Egg cytoplasm
- Animal pole
- Vegetal pole
- Entry of sperm
- Dorsal lip of the blastopore
- Blastula
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Will become endoderm 6 pt Match the following refers to Xenopus by](#)

Flashcards:

<http://www.quizover.com/flashcards/will-become-endoderm-6-pt-match-the-following-refers-to-xenopus-by?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/will-become-endoderm-6-pt-match-the-following-refers-to-xenopus-by?pdf=1505>

### 4.1.3. Is a hollow sphere of cells

Author: David Corey

(6 pt) Match the following (refers to Xenopus development):

Is a hollow sphere of cells

Please choose only one answer:

- Egg cytoplasm
- Animal pole
- Vegetal pole
- Entry of sperm
- Dorsal lip of the blastopore
- Blastula
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Is a hollow sphere of cells 6 pt Match the following refers to Xenopus](#)

Flashcards:

<http://www.quizover.com/flashcards/is-a-hollow-sphere-of-cells-6-pt-match-the-following-refers-to-xenopus?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/is-a-hollow-sphere-of-cells-6-pt-match-the-following-refers-to-xenopus?pdf=1505>

#### 4.1.4. Contains the three germ layers in the right position

Author: David Corey

(6 pt) Match the following (refers to Xenopus development):

Contains the three germ layers in the right position

Please choose only one answer:

- Egg cytoplasm
- Animal pole
- Vegetal pole
- Entry of sperm
- Dorsal lip of the blastopore
- Blastula
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Contains the three germ layers in the right 6 pt Match following](#)

Flashcards:

<http://www.quizover.com/flashcards/contains-the-three-germ-layers-in-the-right-6-pt-match-following?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/contains-the-three-germ-layers-in-the-right-6-pt-match-following?pdf=1505>

#### 4.1.5. Has an uneven distribution of particles

Author: David Corey

(6 pt) Match the following (refers to Xenopus development):

Has an uneven distribution of particles

Please choose only one answer:

- Egg cytoplasm
- Animal pole
- Vegetal pole
- Entry of sperm
- Dorsal lip of the blastopore
- Blastula
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Has an uneven distribution of particles 6 pt Match the following](#)

Flashcards:

<http://www.quizover.com/flashcards/has-an-uneven-distribution-of-particles-6-pt-match-the-following?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/has-an-uneven-distribution-of-particles-6-pt-match-the-following?pdf=1505>

#### 4.1.6. Induces the formation of the neural tube

Author: David Corey

(6 pt) Match the following (refers to Xenopus development):

Induces the formation of the neural tube

Please choose only one answer:

- Egg cytoplasm
- Animal pole
- Vegetal pole
- Entry of sperm
- Dorsal lip of the blastopore
- Blastula
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Induces the formation of the neural tube 6 pt Match following refers](#)

Flashcards:

<http://www.quizover.com/flashcards/induces-the-formation-of-the-neural-tube-6-pt-match-following-refers?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/induces-the-formation-of-the-neural-tube-6-pt-match-following-refers?pdf=1505>

#### 4.1.7. Generates the dorsal-ventral axis

Author: David Corey

(6 pt) Match the following (refers to Xenopus development):

Generates the dorsal-ventral axis

Please choose only one answer:

- Egg cytoplasm
- Animal pole
- Vegetal pole
- Entry of sperm
- Dorsal lip of the blastopore
- Blastula
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Generates the dorsal-ventral axis 6 pt Match following refers to](#)

Flashcards:

<http://www.quizover.com/flashcards/generates-the-dorsal-ventral-axis-6-pt-match-following-refers-to?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/generates-the-dorsal-ventral-axis-6-pt-match-following-refers-to?pdf=1505>



#### 4.1.8. Generates the anterior-posterior axis

Author: David Corey

(6 pt) Match the following (refers to Xenopus development):

Generates the anterior-posterior axis

Please choose only one answer:

- Egg cytoplasm
- Animal pole
- Vegetal pole
- Entry of sperm
- Dorsal lip of the blastopore
- Blastula
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Generates the anterior-posterior axis 6 pt Match following refers](#)

Flashcards:

<http://www.quizover.com/flashcards/generates-the-anterior-posterior-axis-6-pt-match-following-refers?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/generates-the-anterior-posterior-axis-6-pt-match-following-refers?pdf=1505>

#### 4.1.9. (4 pt) Which are true statements about the development of the cereb...

Author: David Corey

(4 pt) Which are true statements about the development of the cerebral cortex:

Please choose only one answer:

- Cell division processes control brain size
- Neurons arise close to their final destination in the brain so that they only have to migrate short distances.
- The deepest cortical layers are formed later in development than shallow layers
- Neurons can only migrate up to 100 times their body length due to the high metabolic cost of the process

Check the answer of this question online at QuizOver.com:

Question: [4 pt Which are true statements about the by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/4-pt-which-are-true-statements-about-the-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/4-pt-which-are-true-statements-about-the-by-dr-david-corey-mit?pdf=1505>

4.1.10. (5 pt) Circle any mechanism used to change how an axon responds to ...

Author: David Corey

(5 pt) Circle any mechanism used to change how an axon responds to cues in its environment

Please choose all the answers that apply:

- Increase in cAMP levels
- Decrease in cGMP levels
- Target induced changes in gene expression
- Local protein synthesis.
- Changes in the composition of receptors in the growth cone.

Check the answer of this question online at QuizOver.com:

Question: [5 pt Circle any mechanism used to change by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-circle-any-mechanism-used-to-change-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-circle-any-mechanism-used-to-change-by-dr-david-corey-mit?pdf=1505>

4.1.11. (5 pt) Circle all true statements:

Author: David Corey

(5 pt) Circle all true statements:

Please choose all the answers that apply:

- Axons navigate distances as long as a meter to find their final targets.
- Slit signaling regulates whether netrin is attractive or repulsive.
- Semaphorins are secreted repellents for a subset of neurons in the DRG.
- Axon guidance molecules use small GTPases which regulate the distribution of microtubules in the growth cone.
- Retinotopic maps form in part because retinal ganglion cells find low levels of Ephrin attractive but high levels of Ephrin are repulsive.

Check the answer of this question online at QuizOver.com:

Question: [5 pt Circle all true statements by Dr. David Corey @MIT Introduction](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-circle-all-true-statements-by-dr-david-corey-mit-introduction?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-circle-all-true-statements-by-dr-david-corey-mit-introduction?pdf=1505>

4.1.12. (4 pt) Circle all true statements:

Author: David Corey

(4 pt) Circle all true statements:

Please choose all the answers that apply:

- CNS axons fail to regenerate because axon guidance cues are not present in the adult nervous system.
- The Nogo receptor binds MAG and Omgp, which are present in CNS myelin.
- All axons grow at the same basic rate.
- Oligodendrocytes produce inhibitory factors such as Nogo66, which can induce growth cone collapse in vitro.

Check the answer of this question online at QuizOver.com:

Question: [4 pt Circle all true statements by Dr. David Corey @MIT Introduction](#)

Flashcards:

<http://www.quizover.com/flashcards/4-pt-circle-all-true-statements-by-dr-david-corey-mit-introduction?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/4-pt-circle-all-true-statements-by-dr-david-corey-mit-introduction?pdf=1505>

#### 4.1.13. The motor neuron requires signals from the myotube to form its syna...

Author: David Corey

(8 pt) In class, we discussed various models for the development of the neuromuscular junction (NMJ), and discovered that no simple model seems to explain all of the experiments.

Please list one experimental observation which is INCONSISTENT with each of the following hypotheses.

The motor neuron requires signals from the myotube to form its synaptic machinery.

- Growth cones release ACh spontaneously and in response to electrical stimulation before they contact myotubes.

Check the answer of this question online at QuizOver.com:

Question: [The motor neuron requires signals from the 8 pt In class we discussed](#)

Flashcards:

<http://www.quizover.com/flashcards/the-motor-neuron-requires-signals-from-the-8-pt-in-class-we-discussed?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/the-motor-neuron-requires-signals-from-the-8-pt-in-class-we-discussed?pdf=1505>

#### 4.1.14. The myotube requires signals from the motor neuron in order to clus...

Author: David Corey

(8 pt) In class, we discussed various models for the development of the neuromuscular junction (NMJ), and discovered that no simple model seems to explain all of the experiments.

Please list one experimental observation which is INCONSISTENT with each of the following hypotheses.

The myotube requires signals from the motor neuron in order to cluster its synaptic components (e.g. AChRs).

- Cultured myotubes cluster postsynaptic receptors in the absence of motor neurons.

Check the answer of this question online at QuizOver.com:

Question: [The myotube requires signals from the motor 8 pt In class we discussed](#)

Flashcards:

<http://www.quizover.com/flashcards/the-myotube-requires-signals-from-the-motor-8-pt-in-class-we-discussed?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/the-myotube-requires-signals-from-the-motor-8-pt-in-class-we-discussed?pdf=1505>

#### 4.1.15. The motor neuron randomly contacts the myotube and then induces the...

Author: David Corey

(8 pt) In class, we discussed various models for the development of the neuromuscular junction (NMJ), and discovered that no simple model seems to explain all of the experiments.

Please list one experimental observation which is INCONSISTENT with each of the following hypotheses.

The motor neuron randomly contacts the myotube and then induces the myotube to cluster synaptic components (e.g. AChRs).

- Tello: after nerve lesion motor fiber clusters are maintained and new nerves growing onto the fiber synapse on these old clusters.

Check the answer of this question online at QuizOver.com:

Question: [The motor neuron randomly contacts the myotube 8 pt In class we discussed](#)

Flashcards:

<http://www.quizover.com/flashcards/the-motor-neuron-randomly-contacts-the-myotube-8-pt-in-class-we-discus?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/the-motor-neuron-randomly-contacts-the-myotube-8-pt-in-class-we-discus?pdf=1505>



#### 4.1.16. The myotube generates postsynaptic clusters (e.g. AChRs) autonomous...

Author: David Corey

(8 pt) In class, we discussed various models for the development of the neuromuscular junction (NMJ), and discovered that no simple model seems to explain all of the experiments.

Please list one experimental observation which is INCONSISTENT with each of the following hypotheses.

The myotube generates postsynaptic clusters (e.g. AChRs) autonomously, and the motor neuron is stabilized when it encounters the postsynaptic density.

- Anderson and Cohen: although cultured myotubes cluster postsynaptic receptors autonomously, co-cultured motor neurons contact the myotubes at sites without clusters and new clusters form at the site of neuronal contact.

Check the answer of this question online at QuizOver.com:

Question: [The myotube generates postsynaptic clusters 8 pt In class we discussed](#)

Flashcards:

<http://www.quizover.com/flashcards/the-myotube-generates-postsynaptic-clusters-8-pt-in-class-we-discussed?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/the-myotube-generates-postsynaptic-clusters-8-pt-in-class-we-discussed?pdf=1505>

#### 4.1.17. (5 pt) Indicate which of the following statements about myelination...

Author: David Corey

(8 pt) In class, we discussed various models for the development of the neuromuscular junction (NMJ), and discovered that no simple model seems to explain all of the experiments.

Please list one experimental observation which is INCONSISTENT with each of the following hypotheses.

(5 pt) Indicate which of the following statements about myelination are true:

- A Schwann cell forms only a single internode.
- An oligodendrocyte is able to form internodes on multiple different axons.
- Schwann cells are located in the central nervous system; oligodendrocytes are in the peripheral nervous system.
- Oligodendrocytes originate from peripheral blood monocytes which migrate into the CNS.
- Oligodendrocytes secrete factors which are able to cluster axonal nodal proteins (Na<sup>+</sup> channels, K<sup>+</sup> channels, etc.) in cultured axons.

Check the answer of this question online at QuizOver.com:

Question: [5 pt Indicate which of the following statements 8 In class we discussed](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-indicate-which-of-the-following-statements-8-in-class-we-discusse?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-indicate-which-of-the-following-statements-8-in-class-we-discusse?pdf=1505>

4.1.18. \_\_\_\_\_ Mitochondrial breakdown is observed.

Author: David Corey

(5 pt) Indicate whether each statement is a feature of apoptosis (A), necrosis (N):

\_\_\_\_\_ Mitochondrial breakdown is observed.

Please choose only one answer:

- apoptosis (A)
- necrosis (N)

Check the answer of this question online at QuizOver.com:

Question: [Mitochondrial breakdown is observed. 5 pt Indicate whether each statement](#)

Flashcards:

<http://www.quizover.com/flashcards/mitochondrial-breakdown-is-observed-5-pt-indicate-whether-each-statement?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/mitochondrial-breakdown-is-observed-5-pt-indicate-whether-each-statement?pdf=1505>

4.1.19. \_\_\_\_\_ Chromatin pattern in nucleus is disturbed.

Author: David Corey

(5 pt) Indicate whether each statement is a feature of apoptosis (A), necrosis (N):

\_\_\_\_\_ Chromatin pattern in nucleus is disturbed.

Please choose only one answer:

- apoptosis (A)
- necrosis (N)

Check the answer of this question online at QuizOver.com:

Question: [Chromatin pattern in nucleus is disturbed 5 pt Indicate whether each](#)

Flashcards:

<http://www.quizover.com/flashcards/chromatin-pattern-in-nucleus-is-disturbed-5-pt-indicate-whether-each?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/chromatin-pattern-in-nucleus-is-disturbed-5-pt-indicate-whether-each?pdf=1505>

4.1.20. \_\_\_\_\_ Following swelling, membrane breaks down.

Author: David Corey

(5 pt) Indicate whether each statement is a feature of apoptosis (A), necrosis (N):

\_\_\_\_\_ Following swelling, membrane breaks down.

Please choose only one answer:

- apoptosis (A)
- necrosis (N)

Check the answer of this question online at QuizOver.com:

Question: [Following swelling membrane breaks down. 5 pt Indicate whether each](#)

Flashcards:

<http://www.quizover.com/flashcards/following-swelling-membrane-breaks-down-5-pt-indicate-whether-each?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/following-swelling-membrane-breaks-down-5-pt-indicate-whether-each?pdf=1505>

4.1.21. \_\_\_\_\_ Can be regulated by neurotrophins.

Author: David Corey

(5 pt) Indicate whether each statement is a feature of apoptosis (A), necrosis (N):

\_\_\_\_\_ Can be regulated by neurotrophins.

Please choose only one answer:

- apoptosis (A)
- necrosis (N)

Check the answer of this question online at QuizOver.com:

Question: [Can be regulated by neurotrophins. 5 pt Indicate whether each statement](#)

Flashcards:

<http://www.quizover.com/flashcards/can-be-regulated-by-neurotrophins-5-pt-indicate-whether-each-statement?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/can-be-regulated-by-neurotrophins-5-pt-indicate-whether-each-statement?pdf=1505>

4.1.22. \_\_\_\_\_ Cells condense.

Author: David Corey

(5 pt) Indicate whether each statement is a feature of apoptosis (A), necrosis (N):

\_\_\_\_\_ Cells condense.

Please choose only one answer:

- apoptosis (A)
- necrosis (N)

Check the answer of this question online at QuizOver.com:

Question: Cells condense. 5 pt Indicate whether each statement is by Dr. David

Flashcards:

<http://www.quizover.com/flashcards/cells-condense-5-pt-indicate-whether-each-statement-is-by-dr-david?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/cells-condense-5-pt-indicate-whether-each-statement-is-by-dr-david?pdf=1505>

4.1.23. (4 pt) Circle all true statements:

Author: David Corey

(4 pt) Circle all true statements:

Please choose all the answers that apply:

- Apoptosis is a natural process that is regulated by a balance between pro-survival Bcl-2 like proteins and pro-apoptotic Bax like proteins.
- Axons compete for limiting amounts of neurotrophins produced by target cells.
- The neurotrophic hypothesis states that axons fail to regenerate because of the absence of neurotrophins in the central nervous system.
- NGF and BDNF both induce dephosphorylation of Trk receptors.

Check the answer of this question online at QuizOver.com:

Question: [4 pt Circle all true statements by Dr. David Corey @MIT Introduction](#)

Flashcards:

<http://www.quizover.com/flashcards/4-pt-circle-all-true-statements-by-dr-david-corey-mit-introduc-0385730?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/4-pt-circle-all-true-statements-by-dr-david-corey-mit-introduc-0385730?pdf=1505>



4.1.24. (5 pt) Indicate which of the following is/are true of neuronal stem...

Author: David Corey

(5 pt) Indicate which of the following is/are true of neuronal stem cells.

Please choose all the answers that apply:

- Though in vivo neurogenesis is limited to the subventricular zone, in vitro studies have shown that there are neuronal precursors in many other brain regions.
- To be classified as a stem cell, a cell must have unlimited capacity for self-renewal.
- Neuronal stem cells are not as well studied as hematopoietic stem cells because of the lack of a true reconstitution assay.
- Stem cells can be classified as totipotent or multipotent.
- It is not yet possible to induce neurogenesis in regions of the adult brain where it does not normally occur.

Check the answer of this question online at QuizOver.com:

Question: [5 pt Indicate which of the following is by Dr. David Corey @MIT Introduction](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-indicate-which-of-the-following-is-by-dr-david-corey-mit-introduc?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-indicate-which-of-the-following-is-by-dr-david-corey-mit-introduc?pdf=1505>

4.1.25. (6 pt) Consider the pathway from temporal retina of the left eye an...

Author: David Corey

(6 pt) Consider the pathway from temporal retina of the left eye and the nasal retina of the right eye through the LGN and to visual cortex. Using a solid line for the left eye projection and a dashed line for the right eye projection, draw a schematic picture of the retinogeniculate projection and thalamocortical projection (including the arbor) from cats of the following ages.

Indicate the layer of cortex that LGN neurons project to:

- a) late prenatal (e50)
  - b) 3 years old
  - c) 3 years old, with the first 6 months with the left eye sutured shut.
- 1) correct crossing of ganglion axons (nasal crosses, temporal does not)
  - 2) LGN projects to layer IV of cortex.
  - 3) LGN layer segregation in newborn
  - 4) cortical arbor overlap in newborn\*
  - 5) LGN layer segregation in 3 year old
  - 6) cortical arbor segregation in 3 year old
  - 7) LGN layer shrinkage of left, expansion of right in MD
  - 8) cortical arbor shrinkage of left, expansion of right in MD.

Check the answer of this question online at QuizOver.com:

Question: [6 pt Consider the pathway from temporal by Dr. David Corey @MIT Introduction](http://www.quizover.com/question/6-pt-consider-the-pathway-from-temporal-by-dr-david-corey-mit-introduc?pdf=1505)

Flashcards:

<http://www.quizover.com/flashcards/6-pt-consider-the-pathway-from-temporal-by-dr-david-corey-mit-introduc?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/6-pt-consider-the-pathway-from-temporal-by-dr-david-corey-mit-introduc?pdf=1505>

4.1.26. (6 pt) Circle all true statements.

Author: David Corey

(6 pt) Circle all true statements.

Please choose all the answers that apply:

- The cellular swelling which occurs during ischemia is due to  $\text{Na}^+$  and  $\text{Cl}^-$ .
- During ischemia, increases in intracellular calcium contribute to cell death
- A decrease in reactive oxygen species is a sign of ischemia as the mitochondrial oxidative phosphorylation machinery slows down
- Within 45 minutes of a stroke the ischemic damage is irreversible and so recovery of CNS function is not possible
- A majority of strokes are due to intracerebral hemorrhage
- "Lacunar" strokes are due to defects in small cerebral vessels

Check the answer of this question online at QuizOver.com:

Question: [6 pt Circle all true statements. by Dr. David Corey @MIT Introduction](#)

Flashcards:

<http://www.quizover.com/flashcards/6-pt-circle-all-true-statements-by-dr-david-corey-mit-introduction?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/6-pt-circle-all-true-statements-by-dr-david-corey-mit-introduction?pdf=1505>

4.1.27. (5 pt) Circle all true statements about Alzheimer's Disease:

Author: David Corey

(5 pt) Circle all true statements about Alzheimer's Disease:

Please choose all the answers that apply:

- Plaques are present in the neuropil, while tangles occur inside the neuronal cell body.
- Cleavage by gamma secretase is essential for production of A $\beta$ , the major component of plaques.
- Deposition of A $\beta$  is a clear indicator of the changes in cognition associated with Alzheimer's Disease.
- APP is a transmembrane protein whose biochemical functions are unknown.
- The pathology of Alzheimer's Disease is usually preceded by obvious changes in cognition and behavior.

Check the answer of this question online at QuizOver.com:

Question: [5 pt Circle all true statements about Alzheimer by Dr. David Corey](#)

Flashcards:

<http://www.quizover.com/flashcards/5-pt-circle-all-true-statements-about-alzheimer-by-dr-david-corey?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/5-pt-circle-all-true-statements-about-alzheimer-by-dr-david-corey?pdf=1505>

#### 4.1.28. False memories activate neurons in the hippocampus

Author: David Corey

(4 pt) Mark whether each of these statements about memory is true or false.

If the statement is false, rewrite the statement correctly.

False memories activate neurons in the hippocampus

Please choose only one answer:

- True
- False

Check the answer of this question online at QuizOver.com:

Question: [False memories activate neurons in the hippocampus 4 pt Mark whether](#)

Flashcards:

<http://www.quizover.com/flashcards/false-memories-activate-neurons-in-the-hippocampus-4-pt-mark-whether?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/false-memories-activate-neurons-in-the-hippocampus-4-pt-mark-whether?pdf=1505>

#### 4.1.29. Memories can be distorted by misattribution, suggestibility or laps...

Author: David Corey

(4 pt) Mark whether each of these statements about memory is true or false.

If the statement is false, rewrite the statement correctly.

Memories can be distorted by misattribution, suggestibility or lapses in attention

Please choose only one answer:

- True
- False

Check the answer of this question online at QuizOver.com:

Question: [Memories can be distorted by misattribution 4 pt Mark whether each](#)

Flashcards:

<http://www.quizover.com/flashcards/memories-can-be-distorted-by-misattribution-4-pt-mark-whether-each?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/memories-can-be-distorted-by-misattribution-4-pt-mark-whether-each?pdf=1505>

#### 4.1.30. Structural encoding of information is the most effective way to rem...

Author: David Corey

(4 pt) Mark whether each of these statements about memory is true or false.

If the statement is false, rewrite the statement correctly.

Structural encoding of information is the most effective way to remember

Please choose only one answer:

- True
- False

Check the answer of this question online at QuizOver.com:

Question: [Structural encoding of information is the 4 pt Mark whether each](#)

Flashcards:

<http://www.quizover.com/flashcards/structural-encoding-of-information-is-the-4-pt-mark-whether-each?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/structural-encoding-of-information-is-the-4-pt-mark-whether-each?pdf=1505>

#### 4.1.31. Implicit and explicit forms of memory are regulated by the hippocam...

Author: David Corey

(4 pt) Mark whether each of these statements about memory is true or false.

If the statement is false, rewrite the statement correctly.

Implicit and explicit forms of memory are regulated by the hippocampus and basal ganglia respectively

Please choose only one answer:

- True
- False

Check the answer of this question online at QuizOver.com:

Question: [Implicit and explicit forms of memory are 4 pt Mark whether each](#)

Flashcards:

<http://www.quizover.com/flashcards/implicit-and-explicit-forms-of-memory-are-4-pt-mark-whether-each?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/implicit-and-explicit-forms-of-memory-are-4-pt-mark-whether-each?pdf=1505>



#### 4.1.32. (6 pt) Depicted are a series of peri-stimulus time histograms (PSTH...

Author: David Corey

(6 pt) Depicted are a series of peri-stimulus time histograms (PSTHs) of the response of a dopaminergic neuron in the substantia nigra pars compacta. Match each of the following PSTHs with the description of the experimental situation that would give rise to it. As a reminder, a PSTH is a plot of the average firing rate of the neuron over time. Firing rate is plotted on the ordinate and time is on the abscissa. The baseline firing rate is shown as a grey line. In A, for example, the neuron exhibits a brief increase in its firing rate (a "burst") after an event at time  $t_2$ .

Check the answer of this question online at QuizOver.com:

Question: [6 pt Depicted are a series of peri-stimulus by Dr. David Corey @MIT](#)

Flashcards:

<http://www.quizover.com/flashcards/6-pt-depicted-are-a-series-of-peri-stimulus-by-dr-david-corey-mit?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/6-pt-depicted-are-a-series-of-peri-stimulus-by-dr-david-corey-mit?pdf=1505>

#### 4.1.33. May be caused by abnormal dispersion of GABAergic neurons in the co...

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

May be caused by abnormal dispersion of GABAergic neurons in the cortex

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [May be caused by abnormal dispersion of 13 pt From the wide range](#)

Flashcards:

<http://www.quizover.com/flashcards/may-be-caused-by-abnormal-dispersion-of-13-pt-from-the-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/may-be-caused-by-abnormal-dispersion-of-13-pt-from-the-wide-range?pdf=1505>

#### 4.1.34. Has been conclusively shown to be a disease of the peripheral immun...

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Has been conclusively shown to be a disease of the peripheral immune system

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Has been conclusively shown to be a disease 13 pt From the wide range](#)

Flashcards:

<http://www.quizover.com/flashcards/has-been-conclusively-shown-to-be-a-disease-13-pt-from-the-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/has-been-conclusively-shown-to-be-a-disease-13-pt-from-the-wide-range?pdf=1505>

#### 4.1.35. Affects both Gaba-R and NMDA-R

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Affects both Gaba-R and NMDA-R

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Affects both Gaba-R and NMDA-R 13 pt From the wide range of topics](#)

Flashcards:

<http://www.quizover.com/flashcards/affects-both-gaba-r-and-nmda-r-13-pt-from-the-wide-range-of-topics?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/affects-both-gaba-r-and-nmda-r-13-pt-from-the-wide-range-of-topics?pdf=1505>

#### 4.1.36. Caused by abnormal regulation of axon guidance signals

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Caused by abnormal regulation of axon guidance signals

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Caused by abnormal regulation of axon guidance 13 pt From the wide](#)

Flashcards:

<http://www.quizover.com/flashcards/caused-by-abnormal-regulation-of-axon-guidance-13-pt-from-the-wide?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/caused-by-abnormal-regulation-of-axon-guidance-13-pt-from-the-wide?pdf=1505>

#### 4.1.37. May be due to defects in oligodendrocytes

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

May be due to defects in oligodendrocytes

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [May be due to defects in oligodendrocytes 13 pt From the wide range](#)

Flashcards:

<http://www.quizover.com/flashcards/may-be-due-to-defects-in-oligodendrocytes-13-pt-from-the-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/may-be-due-to-defects-in-oligodendrocytes-13-pt-from-the-wide-range?pdf=1505>

#### 4.1.38. Caused by mutations in components of the cell death pathway

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Caused by mutations in components of the cell death pathway

Please choose all the answers that apply:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Caused by mutations in components of the 13 pt From wide range topics](#)

Flashcards:

<http://www.quizover.com/flashcards/caused-by-mutations-in-components-of-the-13-pt-from-wide-range-topics?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/caused-by-mutations-in-components-of-the-13-pt-from-wide-range-topics?pdf=1505>

#### 4.1.39. Depletes energy supplies and leads to accumulation of glutamate in ...

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Depletes energy supplies and leads to accumulation of glutamate in the extracellular space

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Depletes energy supplies and leads to accumulation 13 pt From the](#)

Flashcards:

<http://www.quizover.com/flashcards/depletes-energy-supplies-and-leads-to-accumulation-13-pt-from-the?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/depletes-energy-supplies-and-leads-to-accumulation-13-pt-from-the?pdf=1505>



#### 4.1.40. Occurs when convergent extension fails

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Occurs when convergent extension fails

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Occurs when convergent extension fails 13 pt From the wide range](#)

Flashcards:

<http://www.quizover.com/flashcards/occurs-when-convergent-extension-fails-13-pt-from-the-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/occurs-when-convergent-extension-fails-13-pt-from-the-wide-range?pdf=1505>

#### 4.1.41. Caused by an abnormal form of BDNF that is not properly regulated b...

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Caused by an abnormal form of BDNF that is not properly regulated by activity

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Caused by an abnormal form of BDNF that 13 pt From the wide range](#)

Flashcards:

<http://www.quizover.com/flashcards/caused-by-an-abnormal-form-of-bdnf-that-13-pt-from-the-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/caused-by-an-abnormal-form-of-bdnf-that-13-pt-from-the-wide-range?pdf=1505>

#### 4.1.42. Activation of serotonergic neurons which project throughout the brain

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Activation of serotonergic neurons which project throughout the brain

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Activation of serotonergic neurons which 13 pt From the wide range](#)

Flashcards:

<http://www.quizover.com/flashcards/activation-of-serotonergic-neurons-which-13-pt-from-the-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/activation-of-serotonergic-neurons-which-13-pt-from-the-wide-range?pdf=1505>

#### 4.1.43. Reveal the presence of a critical period in development

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Reveal the presence of a critical period in development

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Reveal the presence of a critical period 13 pt From wide range topics](#)

Flashcards:

<http://www.quizover.com/flashcards/reveal-the-presence-of-a-critical-period-13-pt-from-wide-range-topics?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/reveal-the-presence-of-a-critical-period-13-pt-from-wide-range-topics?pdf=1505>

#### 4.1.44. Due to mutations in TrkA

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Due to mutations in TrkA

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Due to mutations in TrkA 13 pt From the wide range of topics covered](#)

Flashcards:

<http://www.quizover.com/flashcards/ue-to-mutations-in-trka-13-pt-from-the-wide-range-of-topics-covered?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/ue-to-mutations-in-trka-13-pt-from-the-wide-range-of-topics-covered?pdf=1505>

#### 4.1.45. Is a disease of fear conditioning

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Is a disease of fear conditioning

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Is a disease of fear conditioning 13 pt From the wide range topics](http://www.quizover.com/question/is-a-disease-of-fear-conditioning-13-pt-from-the-wide-range-topics?pdf=1505)

Flashcards:

<http://www.quizover.com/flashcards/is-a-disease-of-fear-conditioning-13-pt-from-the-wide-range-topics?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/is-a-disease-of-fear-conditioning-13-pt-from-the-wide-range-topics?pdf=1505>

#### 4.1.46. May be due to defects in Schwann cells

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

May be due to defects in Schwann cells

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [May be due to defects in Schwann cells 13 pt From the wide range](#)

Flashcards:

<http://www.quizover.com/flashcards/may-be-due-to-defects-in-schwann-cells-13-pt-from-the-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/may-be-due-to-defects-in-schwann-cells-13-pt-from-the-wide-range?pdf=1505>

#### 4.1.47. May be treated with $\beta$ -adrenergic blockers in the future

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

May be treated with  $\beta$ -adrenergic blockers in the future

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [May be treated with -adrenergic blockers 13 pt From the wide range](http://www.quizover.com/question/may-be-treated-with-adrenergic-blockers-13-pt-from-the-wide-range?pdf=1505)

Flashcards:

<http://www.quizover.com/flashcards/may-be-treated-with-adrenergic-blockers-13-pt-from-the-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/may-be-treated-with-adrenergic-blockers-13-pt-from-the-wide-range?pdf=1505>



#### 4.1.48. Is caused by loss of myelin in the peripheral nervous system

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Is caused by loss of myelin in the peripheral nervous system

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Is caused by loss of myelin in the peripheral 13 pt From wide range](#)

Flashcards:

<http://www.quizover.com/flashcards/is-caused-by-loss-of-myelin-in-the-peripheral-13-pt-from-wide-range?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/is-caused-by-loss-of-myelin-in-the-peripheral-13-pt-from-wide-range?pdf=1505>

#### 4.1.49. Induces formation of a glial scar

Author: David Corey

(13 pt) From the wide range of topics covered in the fourth block, you have learned a lot about how certain neurological disorders can arise.

Match each disease in the left column with a related statement about neurobiology in the right column.

More than one statement may be appropriate, not all statements need to be used, and statements can be used more than once.

Write the appropriate number(s) next to the disease in the first column.

Induces formation of a glial scar

Please choose only one answer:

- Alcoholism 3
- Cataracts 11
- Post traumatic stress disorder 13, 15
- Abnormal eye movements 4
- Hallucinogenic drugs 10
- Schizophrenia 1
- Loss of pain sensitivity 12
- Multiple sclerosis 5, 16
- Brain tumors 6
- Spina bifida 8
- Stroke 7
- ALS 6
- Spinal cord injury 17
- None of the above

Check the answer of this question online at QuizOver.com:

Question: [Induces formation of a glial scar 13 pt From the wide range topics](#)

Flashcards:

<http://www.quizover.com/flashcards/induces-formation-of-a-glial-scar-13-pt-from-the-wide-range-topics?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/induces-formation-of-a-glial-scar-13-pt-from-the-wide-range-topics?pdf=1505>