**Week 7 Assignment 7**

The due date for submitting this assignment has passed. **Due on 2019-09-18, 23:59 IST.**

As per our records you have not submitted this assignment.

1) Which of the following is correct?  
   - In Duchenne muscular dystrophy, \( \gamma \)SG is nonfunctional  
   - In Limb-girdle muscular dystrophy, dystrophin is nonfunctional  
   - Both of them  
   - None of them  

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
None of them

2) Turnover of focal adhesion in a cell can be assessed by  
   - FRAP of Paxillin-GFP transfected cells  
   - Western blotting of paxillin protein  
   - Total fluorescent intensity from Paxillin-GFP transfected cells  
   - All of the above  

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
FRAP of Paxillin-GFP transfected cells

3) Lamins are proteins located  
   - in the inner nuclear membrane  
   - On the outer nuclear membrane  
   - In the perinuclear space

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Week 8

Text Transcripts

Mechanotransduction: LINC Complex in Cell Migration (unit?
unit=59&lesson=62)

Lecture 34: Nuclear Mechanotransduction: Gene Regulation (unit?
unit=59&lesson=63)

Lecture 35: Mechanical Forces & DNA damage (unit?
unit=59&lesson=64)

Download Videos (unit?
unit=59&lesson=65)

Quiz: Week7_Assignment7 (assessment?
name=95)

Weekly Feedback (unit?
unit=59&lesson=66)

Assignment 7 solution file (unit?
unit=59&lesson=100)

Center of the nucleus

No, the answer is incorrect.
Score: 0
Accepted Answers:
in the inner nuclear membrane

4) The order of molecules located from outside of nucleus to inside are

- Actin, Lamin, Nesprin, SUN
- Actin, SUN, Nesprin, Lamin
- Actin, Nesprin, SUN, Lamin
- Actin, Lamin, Nesprin, SUN

No, the answer is incorrect.
Score: 0
Accepted Answers:
Actin, Nesprin, SUN, Lamin

5) In micropipette aspiration, L_N/L_C is calculated to calculate the deformability of the nucleus. How may the ratio varies as cells start to get differentiated from the pluripotent state

- The ratio starts at 0.9 and then increase
- The ratio starts at 0.9 and then decrease
- The ratio remains constant
- The ratio exhibits a biphasic response

No, the answer is incorrect.
Score: 0
Accepted Answers:
The ratio starts at 0.9 and then decrease

6) Suppose there are two types of cells Cell A and Cell B. Cell A has laminA:lamin-B = 0.5 and Cell B has a laminA:lamin-B = 3. Both the cells are allowed to migrate through a 3μm transwell pore channel. After migration, the circularity of both cells before entry into the pores (i.e., at the top) and after exiting the pores (i.e., at the bottom) were measured. What will be the observation?

- Cell A both from top and bottom will have same circularity
- Cell B both from top and bottom will have same circularity
- Cell A from bottom will have different circularity then from top
- Both a and b are correct

No, the answer is incorrect.
Score: 0
Accepted Answers:
Cell A both from top and bottom will have same circularity

7) If NIH 3T3 cells were cultured on a circular patterned surface, then what will be upregulated

- Apoptosis
- Actin cytoskeleton machinery
- Cell migration
- None of them

No, the answer is incorrect.
Score: 0
Accepted Answers:
Apoptosis

8) For which of the following cases, nuclear area fluctuation will be high?

- Cell A both from top and bottom will have same circularity
- Cell B both from top and bottom will have same circularity
- Cell A from bottom will have different circularity then from top
- Both a and b are correct

No, the answer is incorrect.
Score: 0
Accepted Answers:
Cell A both from top and bottom will have same circularity

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When cells are cultured on circular patterns
When Lamin A/C is knocked down
All of the above
None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers: All of the above

9) What is the nuclear deformation limit for cancer cells during migration? 1 point

- 50% of the undeformed size
- 80% of the undeformed size
- 10% of the undeformed size
- 30% of the undeformed size

No, the answer is incorrect.
Score: 0
Accepted Answers: 10% of the undeformed size

10) If NLS-GFP transfected cancer cells pass through small pores (<1 microns in diameter), what 1 point will happen to the fluorescent signal?

- Nuclear/cytoplasmic ration will increase
- Nuclear/cytoplasmic ration will decrease
- Nuclear/cytoplasmic ration will stay constant
- There will be some random signal

No, the answer is incorrect.
Score: 0
Accepted Answers: Nuclear/cytoplasmic ration will decrease