

**Module 07: Cell Adhesion and Migration****Assignment****Total Point Value = 30****Due by midnight on Day 7 of Module 7**

This should be submitted to Blackboard as a pdf.

1. Name that ECM protein:

Answer	Question
Collagen I or II	a. Thin alpha helix fibrils, found in intervertebral disks
myosin	b. Motors composed of this protein are used to contract the cell during migration
desmosome	c. Cell-cell adhesion that links to intermediate filaments
Fibronectin	d. A dimer that contains a heparin-binding domain which facilitates binding to other ECM molecules as well as growth factors resulting in haptotactic gradients
PECAM-1	e. A monomer that participates in homotypic bonds during the leukocyte adhesion cascade
GAGs	f. Comes in a many lengths and (with one exception) covalently attach to proteins increasing their sugar content
Focal contact/ focal adhesion, adherens junction	g. An adhesion that utilizes integrins and connects to the actin cytoskeleton
laminin	h. Three chains joined together in a cross or "t" shaped

2. (1 page or less) Provide a critical response to the assigned reading article "Directed Migration in Neural Tissue Engineering" by Wrobel and Sundararaghavan. First, concisely summarize the goals of this review paper (why was it written?). Second, respond to the paper by thinking critically about what the authors have told you → In the response please consider the different methods of directed migration and comment on which methods are the most advanced, have been the most successful and are good candidates for combination with other directed migration methods.

Full points were given for answering all of the questions mentioned above and giving justification for your answers.

**Assignment Rubric**

Question	Component	Total Point Value
1	a	1
	b	1
	c	1
	d	1
	e	1
	f	1
	g	1
	h	1
2	Concise summary	5
	Response	17

Total Point Value = 30