

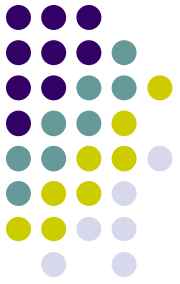
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Corneal Hydration

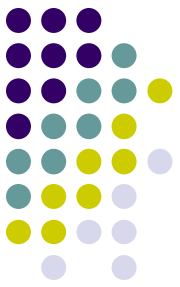
- Corneal transparency requires that its water content be maintained at %

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Corneal Hydration



- Corneal transparency requires that its water content be maintained at **78%**



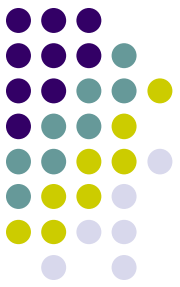
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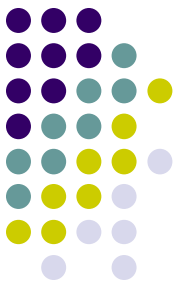
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- The corneal water content becomes progressively greater from anterior to posterior vs
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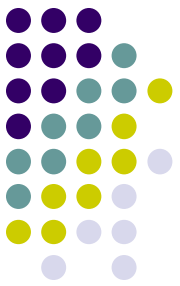
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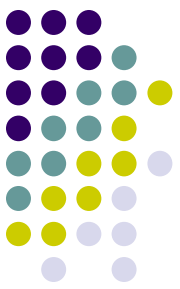
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dessicate **the** cornea, while corneal GAGs work to hydrate vs
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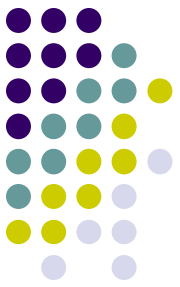


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What are GAGs?



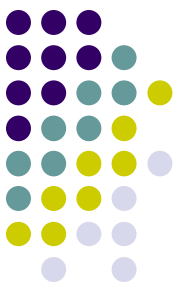
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What are GAGs?

Glycosaminoglycans—important components of the corneal stroma



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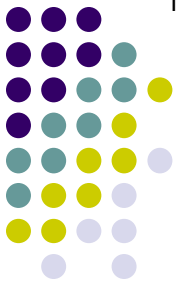
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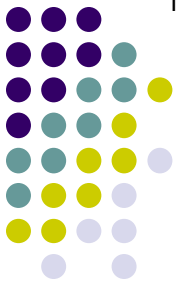
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GAGs are negatively charged and thus repel each other. In repelling each other, they expand the intrastromal space, thereby producing a swelling pressure.

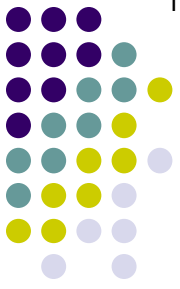


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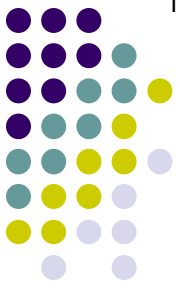


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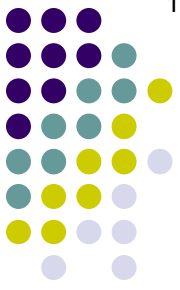
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By pushing against the cornea, IOP in effect 'wrings out the sponge,' promoting dessication. An intact endothelium-Descemet's effectively prevents aqueous ingress, unless IOP is so high as to overwhelm the endothelial pump function.



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