**Henry et al., 2016**

North Atlantic ocean circulation and abrupt climate change during the last glaciation

1. Make a list as you go of all the proxies used in this study and what that proxy is used for.
	1. What are any assumptions made for each of these proxies? (Proxies are great. I love proxies. Still, they all have issues.) Are these assumptions addressed in the study?
2. Why did this study choose MIS 3 to focus on?
3. Why is the Bermuda Rise such an interesting region for this type of study?
4. What was the AMOC doing for each stadial and interstadial interval? What is the key evidence for this?
5. How rapidly is it suggested that the AMOC can switch between strong and reduced-to-nonexistent circulation?
6. Based on any ocean/atmosphere processes we’ve discussed so far this semester, why does northern hemispheric climate leading Antarctic climate by two centuries make sense?
7. Does this paper suggest that northern hemispheric climate is *forced* or *reinforced* by AMOC variations?

**Brown and Galbraith, 2016**

Hosed vs. unhorsed: interruptions of the Atlantic Meridional Overturning Circulation in a global coupled model, with and without freshwater forcing

1. First things first--What is a key assumption this study (and pretty much all “hosing” experiment studies) is based on?
2. A few foundational definitions-- what is a “hosing” experiment representing? What is a Heinrich Event? How is this different than a Dansgaard-Oeschger (D/O) event?
3. What are the pros and cons of using a “moderately low resolution, but full-complexity” model?
	* Do you think the model’s unhosed situations are realistic or unrealistic?
4. If it’s not due to hosing, what’s another possible mechanism for causing an AMOC shift?
5. Under both hosed and unhosed scenarios, what is the general trend for surface air temperatures, precipitation, and ocean biogeochemistry?
6. Which do you think is more important overall for climate responses to AMOC disruptions: being hosed/unhosed or the background climate state?