**CREDIBLE SCIENCE**: Key Points Worksheet 2

**Preregistration**

Submit your completed worksheet to the Canvas assignment

# “[The preregistration revolution](http://www.pnas.org/content/115/11/2600)”

Nosek and colleagues distinguish prediction and postdiction and highlight the advantage of preregistration to prevent hindsight bias (Nosek et al. 2018).

Describe at least one situation you find plausible where unintentional hindsight bias could lead to publishing false positive results.

They argue that one dataset should not be used both for generating and then testing a hypothesis.

Place the phrases below into the boxes to construct a diagram of a scientific process matching what they propose. You can also draw any other diagram shape and use other words, and take a picture of it and paste it here, as long as it matches their argument.

* **Preregister confirmatory analysis**
* **Generate new hypothesis**
* **Test hypothesis with new dataset**
* **Collect/generate new dataset**
* **Use exploratory analyses to examine all data collected to date**

Describe in your own word the challenge(s) that you think may apply most to you, or that you fear most, and consider the feasibility of the procedures proposed to alleviate this/these challenge(s).

Describe the incentive for preregistration that you would value most and assess its current strength.

# “[Thoughts on preregistering my research](http://ecologybits.com/index.php/2016/11/16/thoughts-on-preregistering-my-research/)”

Margaret Kosmala, a post-doctoral fellow, describes her experience with preregistering her study (Kosmala 2016).

List the three drawbacks she mentions.

List at least two of the associated benefits that come with some of those drawbacks

# References

Kosmala M. 2016. Thoughts on preregistering my research. Blog post on Ecology Bits. <http://ecologybits.com/index.php/2016/11/16/thoughts-on-preregistering-my-research/> Accessed November 27 2018.

Nosek, B. A., et al. 2018. The preregistration revolution. ***Proceedings of the National Academy of Sciences*** 115(11): 2600.