**~~Home~~**

~~The Walker Laboratory focuses on understanding how photosynthesis interacts with plant metabolism across many biochemical and physiological scales. We have been in the PRL since the Summer of 2018.~~

~~Please check out our research (link) and people (link) for more about what we do.~~

**~~Research~~**

~~Research in the Walker Lab reveals how photosynthetic fluxes interact with plant metabolism and the environment to drive energy capture, carbon fixation and growth. We use these findings to scale up the impact of photosynthetic metabolism to the leaf and canopy scale. Questions we find particularly interesting are those that produce a quantitative or integrative result. Our long-term vision is to combine classical measurements of carbon and energy exchange with recent advances in resolving metabolic fluxes through metabolism using isotopic labeling methods. Our ultimate goal is to engineer more efficient photosynthesis under dynamic conditions and better understand our planet’s response to climate change.~~

~~Having started in the summer of 2018, we are a young lab and have many exciting directions underway, broadly classified into the following categories:~~

* ~~The function and regulatory role of photorespiration under real-world conditions~~
* ~~Developing next-generation integration of metabolic flux measurements of carbon assimilation~~
* ~~Mechanisms of CO~~~~2~~ ~~transfer from the atmosphere to the chloroplast~~

~~To get a feel for our research, please peruse our publications (~~[~~Link~~](https://scholar.google.com/citations?user=X_Ny2ccAAAAJ&hl=en)~~)~~

~~If you are interested broadly in these types of research questions please contact (link) Berkley to discuss open positions (link) in the lab.~~

**~~People~~**

* **~~Dr. Berkley Walker (PI)~~**~~: Berkley was born in Colorado and grew up in Texas and Oregon and initially thought he would pursue a career in business up until a year after graduating from Brigham Young University with a degree in microbiology. Along the way he founded a granola bar company and worked as a product manager for what is now the METER Group(~~[~~Link?~~](https://www.metergroup.com/)~~), where he was able to attend his first graduate course in environmental biophysics. It was there that he realized his passion for understanding the world through a scientific lens and headed for graduate school at Washington State University studying Molecular Plant Sciences with Dr. Asaph Cousins(~~[~~Link~~](https://sbs.wsu.edu/asaph-cousins/)~~). Following a postdoc with Don Ort (~~[~~link~~](https://ripe.illinois.edu/team/don-ort)~~) at the University of Illinois he received an Alexander von Humboldt Fellowship (~~[~~link~~](https://www.humboldt-foundation.de/web/home.html)~~) hosted by Andreas Weber (~~[~~link~~](http://www.plant-biochemistry.hhu.de/en.html)~~) at Heinrich Heine University in Düsseldorf, Germany. He is now thrilled to start his first independent position at MSU within the Plant Research Laboratory. When he is not thinking about fluxes of energy or carbon, he enjoys hiking, bike-riding or experiencing new cultures with his family.~~
* **~~Your picture here~~**~~: (Igor- can you find a stock photo of an outline of a person with a question mark?)~~

**~~Lab News~~**

* ~~(Newsfeed as we discussed. When site is up, you can show me how to add stories to it)~~

**~~Open Positions~~**

~~The Walker Lab is actively recruiting graduate students through the MSU Molecular Plant Sciences (~~[~~Link~~](https://mps.natsci.msu.edu/)~~), Plant Biology (~~[~~link~~](https://plantbiology.natsci.msu.edu/graduate-program/)~~) and Cell and Molecular Biology Program (~~[~~link~~](https://plantbiology.natsci.msu.edu/graduate-program/)~~). We also have several projects that would lend well for co-advisement between our lab and more quantitative sciences such as applied mathematics. We are also currently recruiting postdoctoral scientists, please contact Berkley directly for questions.~~

~~As a note of warning: work in the Walker lab requires individuals knowledgeable or willing to learn a variety of skills. You will pipette, solder, code, clone and even do algebra. We seek those excited to make connections between fields not previously connected.~~

**~~Contact us~~**

**~~MSU-DOE Plant Research Laboratory~~** ~~Michigan State University  
Plant Biology Laboratories  
612 Wilson Road  
Room 310  
East Lansing, MI 48824~~

**~~Office~~**~~: (517) 355-3928~~**~~Lab~~**~~: (517) 353-9090~~

**~~Email: berkley@msu.edu~~**

**~~(Include a map like what is found in the Brandizzi lab website)~~**

**~~Publications~~**

* ~~(Igor-Let’s remove this and have it just as a section under “research”)~~

**Lab resources**

* Password-protected link to dokuwiki