@bubblyburke

The EMERGE Fieldwork Safety & Logistics Handbook: A framework for planning and discussing safe and inclusive fieldwork campaigns

Sophia A. Burke[1], Ruth K. Varner[1,3], Virginia I. Rich[2], 2021 EMERGE Field Team

[1] Earth Systems Research Center, Institute for the Study of Earth, Oceans and Space, University of New Hampshire, Durham, NH, USA, [2] Department of Microbiology, The Ohio State University, Columbus, OH, USA, [3] Department of Earth Science, University of New Hampshire, Durham, NH, USA

EMERGE: an NSF funded *Biology Integration Institute* formed to investigate the **E**mergent **E**cosystem **R**esponse to Chan**GE** in a model subarctic peatland ecosystem.

90+ participants from varying disciplines, locations and career stages

EMERGE takes a multi-pronged approach to create an inclusive, transdisciplinary research collaborative with participants.

A central pillar of EMERGE is the annual fieldwork campaigns to Stordalen Mire, Northern Sweden (Figure 1)

EMERGE Institute Toolkit: This Handbook part of larger product of inclusive transdisciplinary research tools created by EMERGE.

Handbook Goal:

Provide guidance on how to conduct successful fieldwork that promotes the physical, social and mental wellbeing of EMERGE field team members.

What inspired this handbook?

- Calls to action presented for supervisors and institutions in Demery & Pipkin (2021)
- Session 6 ("Racism and Inclusivity") URGE Pod discussions and Safety Plan Deliverable. https://urgeoscience.org/
- Field safety templates created by the University of California Berkeley (UCB EH&S, 2021) and Duke University (DU O&EHS, 2021)
- Information presented in the 2021 Fieldwork Toolkit Leadership Training Series hosted by the University of California Riverside Field Research Safety Center for Excellence.

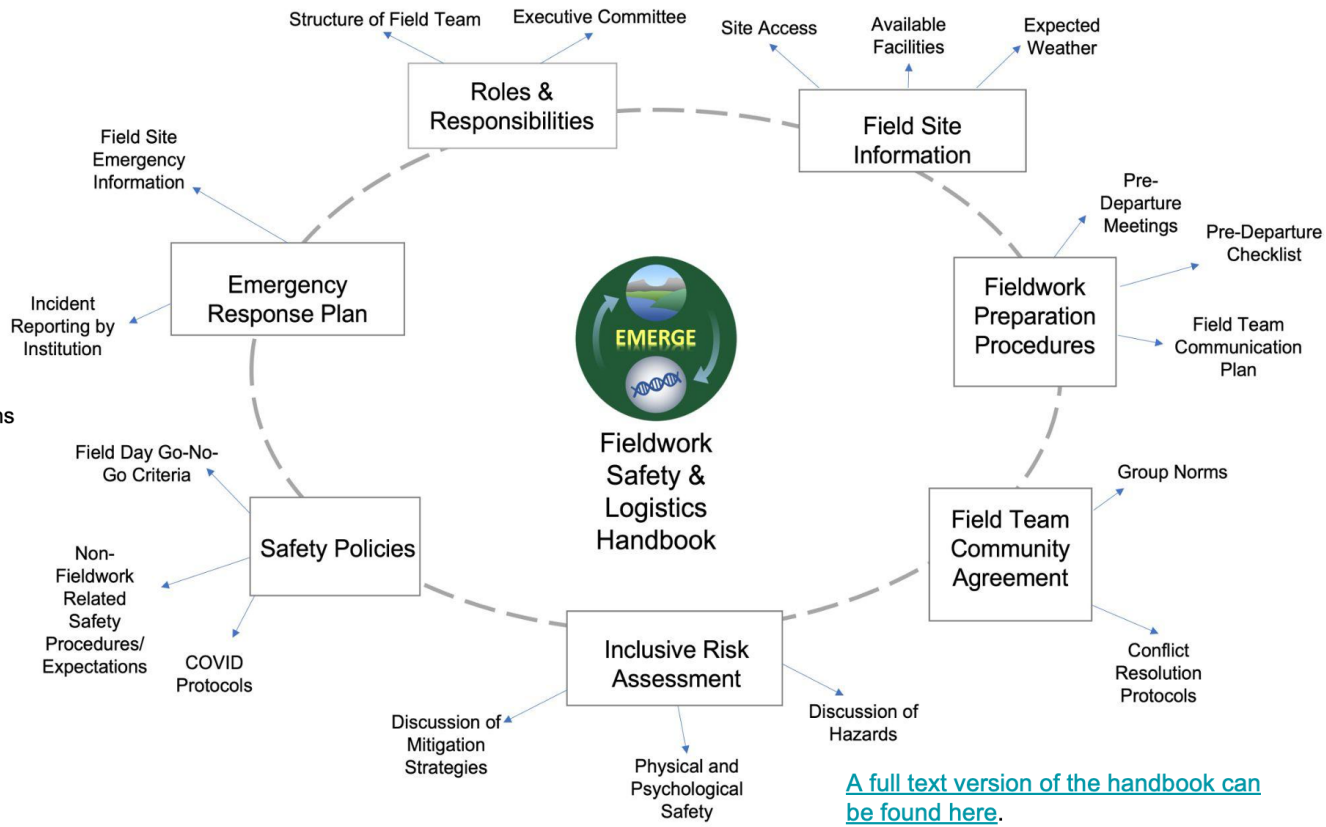

Figure 2. Diagram showing the major sections within the handbook and important subsections. Burke (2022).

A full text version of the handbook can be found here.

Use During REU & Field Campaigns

- The Handbook (Figure 2) was used to prepare for and while in the field (Figure 3, Figure 4) with discussions that started at UNH.
- Field Team members stayed at the Abisko Scientific Research Station (ANS), located 11km east of the field site, Stordalen Mire (Figure 5)

Figure 1. Image of Stordalen Mire, Abisko, Sweden. Photo Credit: Sophia Burke.

Implementation Flow Chart

Figure 3. Flow chart outlining the implementation of this handbook in fieldwork preparations in association with the EMERGE-Biology Integration Institute

Figure 4. REU Team Members at UNH. Photo Credit Ruth Varner.

Figure 5. REU students hanging out outside their dorm at the Abisko Scientific Research Station. Photo Credit: Ruth Varner.

Find out more information about the EMERGE Biology Integration Institute by visiting: https://emerge-bii.github.io/

Conclusions & Future Work

- The framework was presented to EMERGE 2022 Summer Program participants and will continue to be a part of the EMERGE Summer Program
- The EMERGE Handbook will continue to be updated each year with input from each field team (including REU students) and will continue to be an important part of field preparations for EMERGE.
- A Fieldwork Safety Program is in development at UNH which draws on the EMERGE Handbook as a framework.

Acknowledgements: This is a contribution of the EMERGE Biology Integration Institute, funded by the National Science Foundation, Biology Integration Institutes Program, Award # 2022070.

References: Burke, S.A., (2022). EMERGE Intistute Field Safety & Logistics Handbook, *Earth Systems Research Center*. 218 https://scholars.unh.edu/ersc/218. Demery, A.-J. C., & Pipkin, M. A. (2021). Safe fieldwork strategies for at-risk individuals, their supervisors and institutions. *Nature Ecology & Evolution*, *5*(1), 5–9. https://doi.org/10.1038/s41559-020-01328-5. DU O&ESO. (2021). Duke University Fieldwork Safety Plan. Duke University Occupational & Environmental Safety Office. Retrieved from https://www.safety.duke.edu/sites/default/files/FieldworkSafetyPlan_0.docx. UCB EH&S. (2021). UC Berkeley Field Safety Plan. UC Berkeley Office of Environment, Health and Safety. Retrieved from https://ehs.berkeley.edu/field-research