























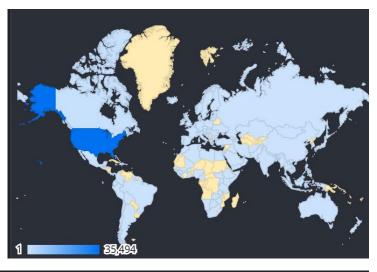


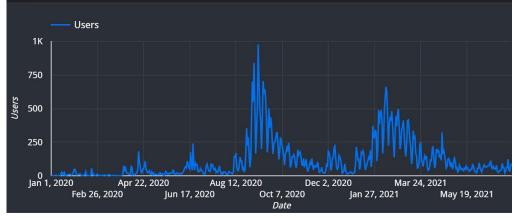


# Teaching Introductory Physical Geology Lab Online

- Pre-pandemic resource
- Pandemic analytics
- Post-pandemic Insights







# EER Nashville July 2019 Intro Physical Geology Lab

Mineral Identification
Resources Online

First Use Fall 2019



#### EER19 – Pre-pandemic Online Lab Resources

4 websites for Intro Physical labs: minerals & rocks



- Websites are not labs toolkits with resources
- Roll-your-own labs with easy-to-copy links from websites





























#### Dashboard Analytics -

Jan 1, 2020-July 12, 2021

omg. georockme.



com

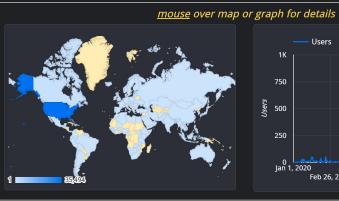


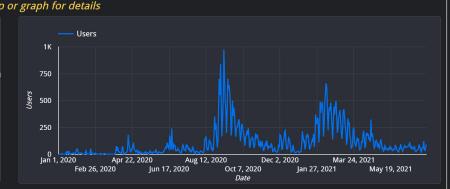
Use of Website Analytics 2020 Year to Date

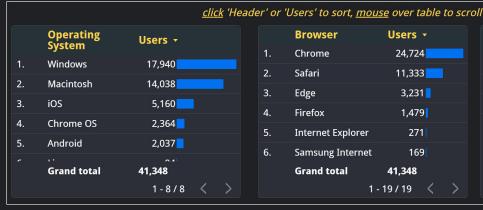
omg.georockme.com

Scott Brande









	50.5 to 50.4, <u>11.</u>		50.
	Browser	Users	•
1.	Chrome	24,724	
2.	Safari	11,333	-
3.	Edge	3,231	
4.	Firefox	1,479	1
5.	Internet Explore	r 271	
6.	Samsung Interne	et 169	l l
	Grand total	41,348	
		1 - 19 / 19	< >

Device Users •	
1. desktop 34,153	
2. mobile 6,812	
3. tablet 405	
Grand total 41,348	
1-3/3	( >

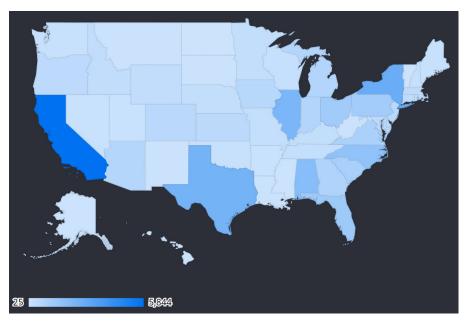


#### U.S. States



# Dashboard Analytics – omg.georockme.com

Jan 1. 2020 - July 12, 2021



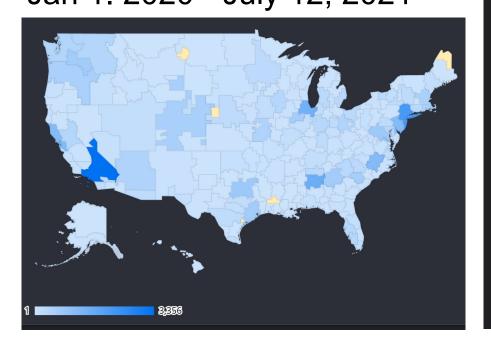
	State	Users ▼
1.	California	5,844
2.	New York	2,831
3.	Texas	2,504
4.	Illinois	2,338
5.	Alabama	1,999
6.	North Carolina	1,748
7.	Washington	1,636
8.	Florida	1,317
9.	Ohio	1,241
10.	Pennsylvania	1,187
11.	South Carolina	1,065
12.	Virginia	937
13.	Georgia	844
	Grand total	35,560
	1 - 52 / 52	< >



#### U.S. Metros



#### <u>Dashboard Analytics</u> – <u>omg.georockme.com</u> Jan 1. 2020 - July 12, 2021



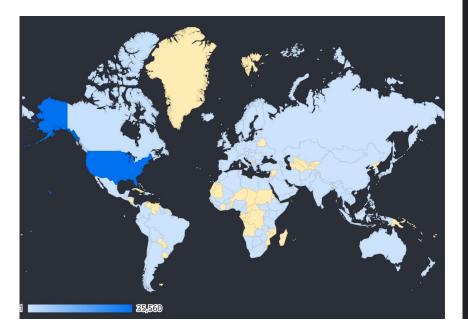
	Metro	Users <b>▼</b>
1.	Los Angeles CA	3,356
2.	New York, NY	2,162
3.	Birmingham (Ann and Tusc) AL	1,577
4.	Chicago IL	1,476
5.	(not set)	1,337
6.	Philadelphia PA	1,202
7.	Raleigh-Durham (Fayetteville) NC	1,187
8.	San Francisco- Oakland-San Jose CA	1,186
9.	Dallas-Ft. Worth TX	787
10.	Washington DC (Hagerstown MD)	762
	Grand total	35,560
	1 - 100 / 206	< <b>&gt;</b>



#### World



Dashboard Analytics – omg.georockme.com
Jan 1. 2020 - July 12, 2021



	Country	Users 🕶
1.	United States	35,560
2.	Canada	841
3.	Kuwait	772
4.	Philippines	460
5.	India	373
6.	United Kingdom	348
7.	Brazil	224
8.	Belgium	215
9.	Australia	211
10.	(not set)	199
11.	South Africa	164
12.	Colombia	155
13.	Spain <b>Grand total</b>	128 <b>41,406</b>
	1 - 100 / 133	< <b>&gt;</b>

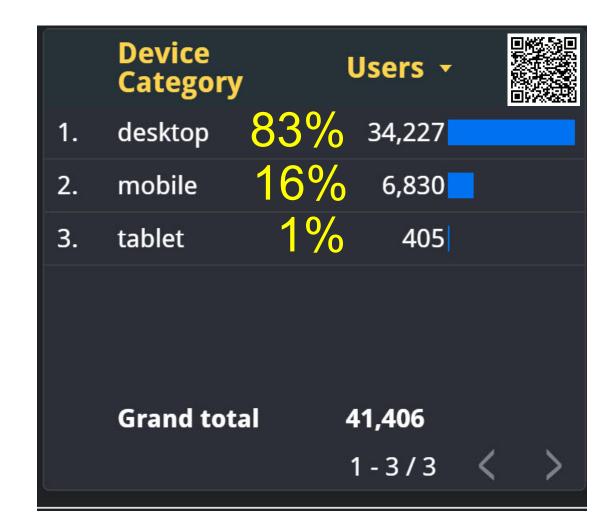


#### Devices

Dashboard
Analytics –

Jan 1. 2020-July 12, 2021

omg. georockme. com



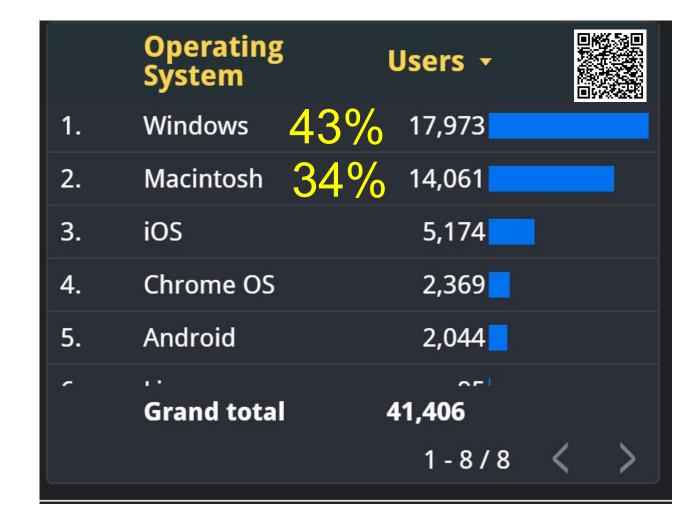


#### OSs

### <u>Dashboard</u> <u>Analytics</u> –

Jan 1. 2020-July 12, 2021

omg. georockme. com





#### Browsers

Dashboard Analytics –

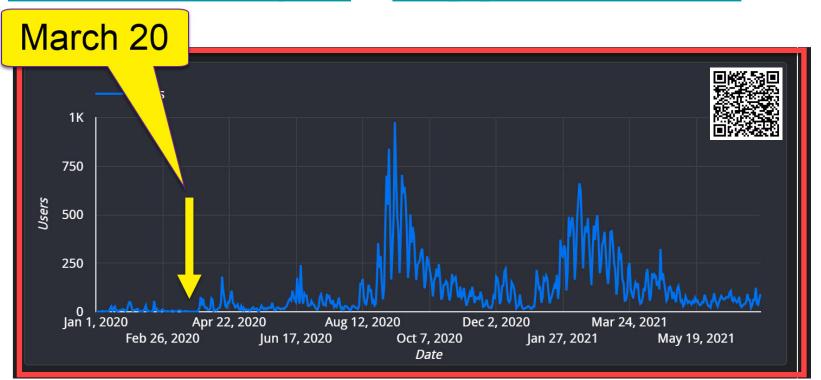
Jan 1. 2020-July 12, 2021

omg. georockme. com

	Browser		Users 🕶	
1.	Chrome	60%	24,797	
2.	Safari	27%	11,349	
3.	Edge	8%	3,240	
4.	Firefox	4%	1,482	
5.	Internet Ex	plorer	271	
6.	Samsung Ir	nternet	169	
	Grand tota	d ·	41,406	
		1 - 1	9 / 19 〈	>

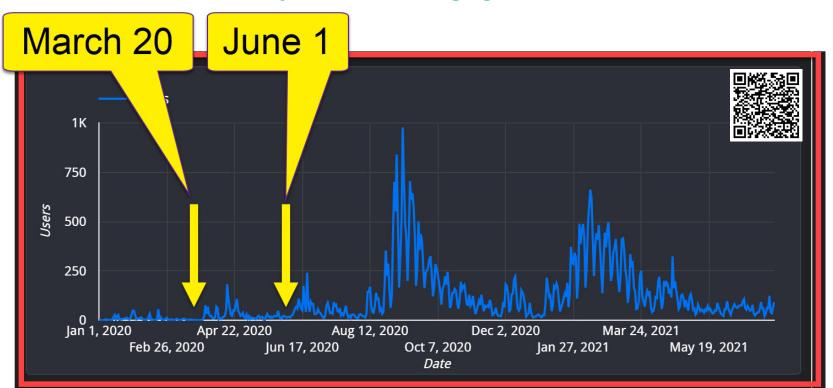


# Pandemic Users - Jan 1. 2020 - July 12, 2021



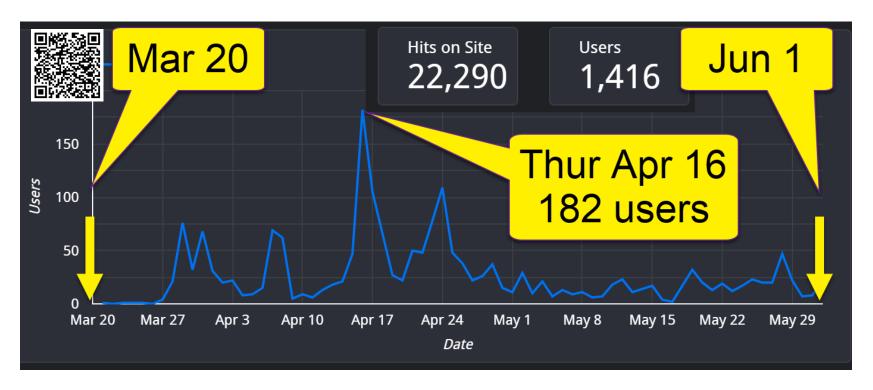


# Pandemic Users - Spring Term 2020



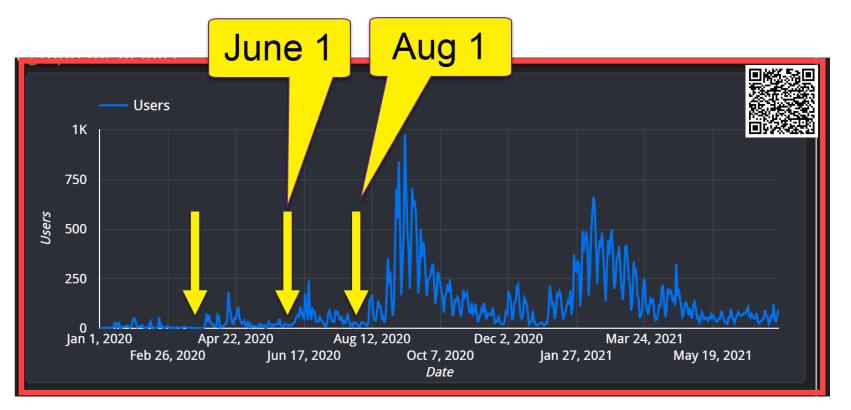


# Pandemic Users - Spring Term 2020



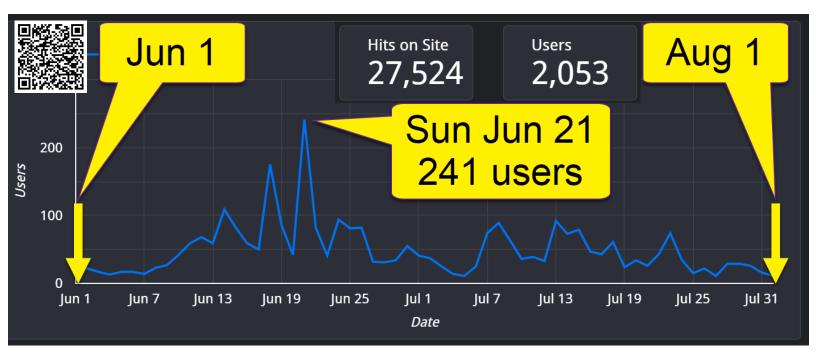


## Pandemic Users - Summer Term 2020



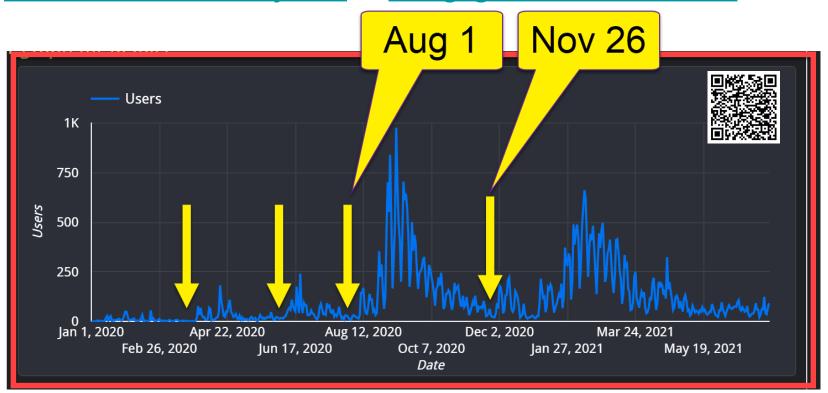


### Pandemic Users - Summer Term 2020



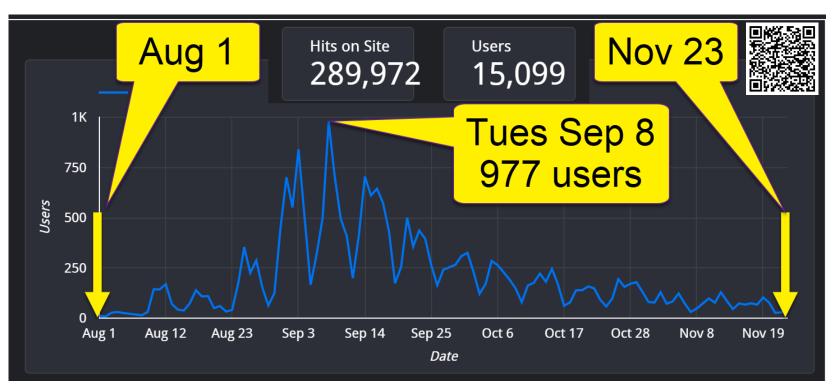


## Pandemic Users - Fall Term 2020



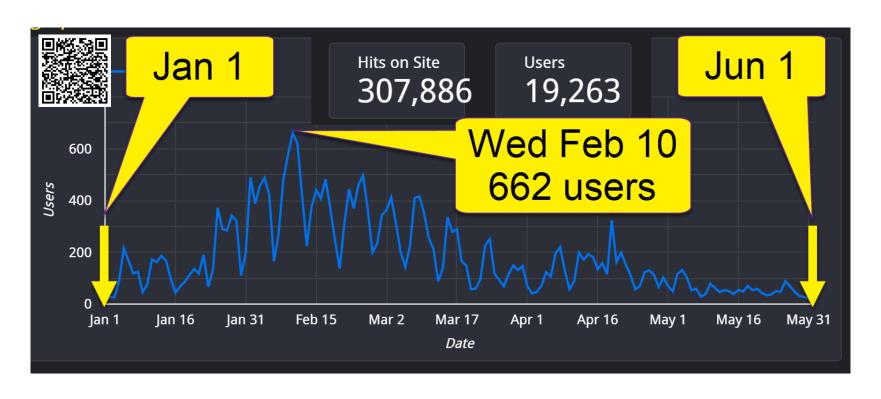


# Pandemic Users – Fall Term 2020





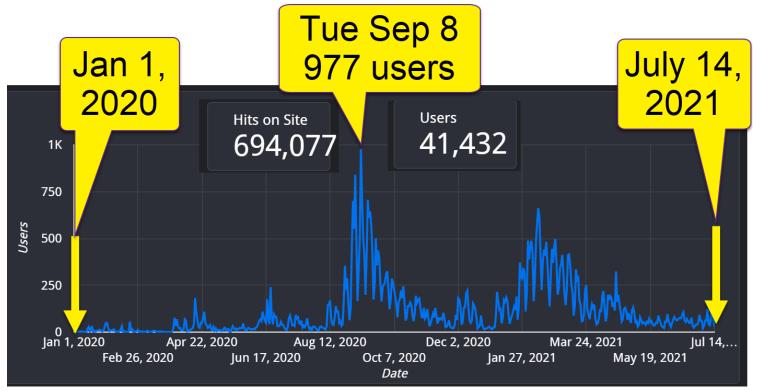
# Pandemic Users - Spring Term 2021





## Pandemic Users - Jan 1. 2020 - July 14, 2021







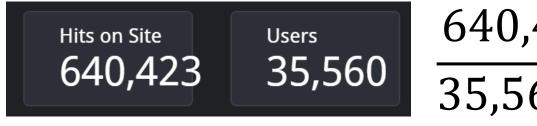
# U.S. Users - Jan 1. 2020 - July 13, 2021

```
Hits on Site Users 35,560
```



# U.S. Users - Jan 1. 2020 - July 13, 2021

Dashboard Analytics - omg.georockme.com



$$\frac{640,423 \ hits}{35,560 \ users} = 18$$



### U.S. Users - Jan 1. 2020 - July 13, 2021



#### Dashboard Analytics - omg.georockme.com

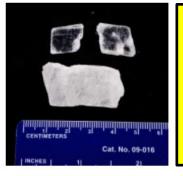


Hits on Site **640,423** 

Users 35,560  $\frac{640,423 \ hits}{35,560 \ users} = 18$ 







29 unknowns + bunch of web pages

Image credit: Scott Brande

Image credit: Scott Brande

Image credit: Scott Brande



# Post-pandemic Uses for Pre-Pandemic Resources

#### Pandemic Needs

- off-campus
   lack of lab access
- lack of relevant digital media, accessible online



























# Post-pandemic Uses for Pre-Pandemic Resources

#### Pandemic Needs

- off-campus
   lack of lab access
- lack of relevant
   digital media,
   accessible online

#### Post-pandemic Needs

- off-campus
   missed lab
- pre-post-lab study,
   quiz review
- distance learning formats





















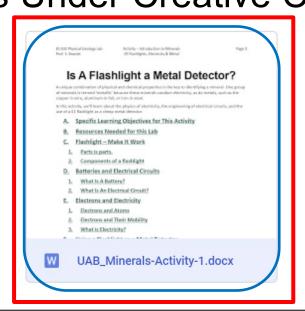




Free Resources Under Creative Commons



- Remix into your own lab write-up
- Include CC license (in footnote, example below)





BY – credit author

NC – non-commercial

SA – share alike

You may modify the content of this form for your use according to this license. "This work by Scott Brande is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License."

#### Contact: mailto:soskarb@gmail.com





















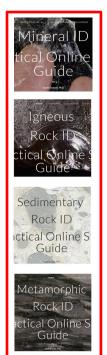






#### Colleagues Share Labs Using omg.georockme.com

#### Websites



#### Examples of Lab Write-Ups - Downloadable





please respect credit











Carolina L. Michel, Chandler-Gilbert Community College, Chandler, AZ Julia M. G. Miller, Belmont University, Nashville, TN Patricia Gallagher, Drexel University, Philadelphia, PA Alexander Zekulin, Brookhaven College & Tarrant County College, Ft. Worth, TX ----- Correspondents -----

Chris Berg, Orange Coast College, Costa Mesa, CA Vince Cronin, Baylor University, Waco, TX Hillary Goodner, Yakima Valley College, Yakima, WA Wendi Williams, South Texas College, McAllen, TX & etc.



















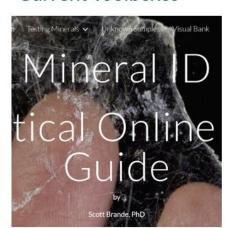


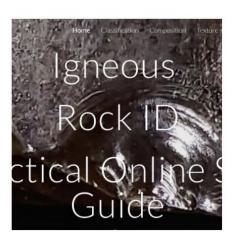


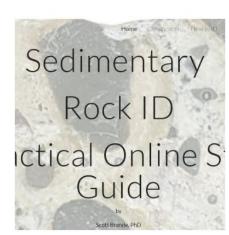


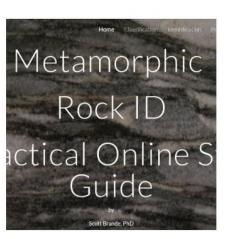


**Current Toolboxes** 









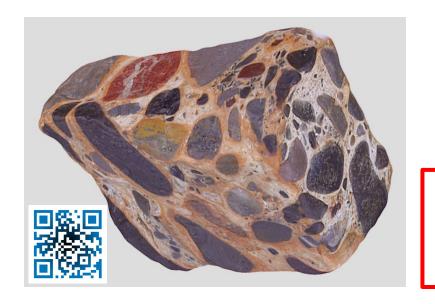
metamorphic rock

minerals igneous rock sedimentary rock



# New Project Learning from 3D Models





public downloadable 3D models sketchfab.com/rockdoc



## Rockviewer 2 - Contact Me to Participate

#### NSF Award-2020

Award Abstract #1937389

Collaborative Research: 3D Virtual-Rock Models for Testing Category Learning Theory to Improve Student Learning in Physical Geology

NSF Org:	<u>DUE</u> <u>Division Of Undergraduate</u> <u>Education</u>
Initial Amendment Date:	March 18, 2020
Latest Amendment Date:	March 18, 2020
Award Number:	1937389
Award Instrument:	Standard Grant
Program Manager:	Karen Keene DUE Division Of Undergraduate Education EHR Direct For Education and Human Resources
Start Date:	April 1, 2020
Start Date:	April 1, 2020 March 31, 2022 (Estimated)
	• •
End Date:	March 31, 2022 (Estimated)
End Date: Awarded Amount to Date:	March 31, 2022 (Estimated) \$214,678.00 Scott Brande sbrande@uab.edu (Principal
End Date: Awarded Amount to Date: Investigator(s):	March 31, 2022 (Estimated)  \$214,678.00  Scott Brande sbrande@uab.edu (Principal Investigator)  University of Alabama at Birmingham AB 1170 Birmingham, AL 35294-0001



- physical rocks
- limited set
- campus access only
- 3D virtual rocks
- unlimited set
- access anytime, anywhere

- Experiments to Test Training Effectiveness in Rock Identification
- Build an archive of 3D models for testing
- Some \$ for honoraria contact me about your samples

mailto:sbrande@uab.edu



# Pandemic Resources for the Post-Pandemic EDU omg.georockme.com

- New contact? Used OMG website?
- Please <u>write</u> <u>sbrande@uab.edu</u>
- small funding for rock samples 3D models
- write sbrande@uab.edu

#### GSA Portland 2021 – In Person

Please consider submitting an abstract to Geological Society of America oral Topical Session T167. The Lasting Effects of the 2020–2021 COVID-19 Crisis on Geoscience Education: Insights, Problems, and Unanticipated Benefits.

Submit your abstract. Share your research.

Abstracts deadline: 20 July

**Submit Abstract** 





























