

Arianna Soldati
CURRICULUM VITAE

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CURRENT POSITION

2020 **Assistant Professor (Volcanology)**
North Carolina State University

POSTDOCTORAL EXPERIENCE

2018- **Humboldt Postdoctoral Fellow**
2020 Ludwig-Maximilians-Universität München (Munich, Germany)
Projects: Rheological variability of the 2018 Kilauea eruption; MORB rheology
Effect of phenocrysts on lava rheology; effect of strain rate on lava rheology
Advisor: Prof. D.B. Dingwell

EDUCATION

2018 **Ph.D. in Geology; Minor in College Teaching**
University of Missouri – Columbia (Columbia, MO, U.S.A.)
semester VI spent at Observatoire Volcanologique du Piton de La Fournaise (La Réunion, French DOM) and Laboratoire Magmas et Volcans (Clermont Ferrand, France)
Dissertation: Rheological and morphological evolution of basaltic lava flows
Advisor: Prof. A. G. Whittington

2013 **M.Sc. in Geology** (comprehensive mark: 110/110 cum laude)
University of Pisa (Pisa, Italy)
year II spent at University of Bristol (Bristol, U.K.) as an Erasmus Placement Student
Thesis: Bubble rise and break-up in volcanic conduits
Advisors: Prof. M. Rosi, Prof. K. V. Cashman, Dr. A. C. Rust

2011 **B.Sc. in Geology** (comprehensive mark: 110/110 cum laude)
University of Pavia (Pavia, Italy)
semester V spent at Université Pierre et Marie Curie (Paris, France) as an Erasmus Student
Thesis: Geochemical study of melt inclusions in clinopyroxenes from the 2001 and 2002-2003 Etna eruptions
Advisor: Prof. R. Vannucci

RESEARCH AND SCHOLARSHIP

PEER-REVIEWED PUBLICATIONS

7. **Soldati A.**, Sant C., Farrell J.A., Wysocki R., Karson J.A. (2020) *The Effect of Bubbles on the Rheology of Basaltic Lava Flows: Insights From Large-Scale Two-Phase Experiment*. Earth and Planetary Science Letters 548, 116504. DOI: 10.1016/j.epsl.2020.116504.
<https://doi.org/10.1016/j.epsl.2020.116504>
 6. **Soldati A.** & Illingworth S. *In my remembered country: what poetry tells us about the changing perceptions of volcanoes between the XIX and XXI centuries*. Geoscience Communications DOI: 10.5194/gc-2019-17.
<https://gc.copernicus.org/articles/3/73/2020/>
 5. Qin Z., **Soldati A.**, Velázquez L. C., Rust A. C., Suckale J., Cashman K. V. (2018) *Slug stability in flaring geometries and ramifications lava-lake degassing*. Journal of Geophysical Research, JGRB53158. DOI: 10.1029/2018JB016113
<https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2018JB016113>
 4. Farrell J., Karson J., **Soldati A.**, Wysocki R. (2018) *Understanding multi-axis folding of pāhoehoe lava crusts using photogrammetry, Fourier transform, and observations of experimental lava flows*. Bulletin of Volcanology, 80:84. DOI: 10.1007/s00445-018-1258-5
<http://link.springer.com-443.webvpn.jxutcm.edu.cn/article/10.1007%2Fs00445-018-1258-5>
 3. **Soldati A.**, Harris A., Gurioli L., Villeneuve N., Rhéty M., Gomez F., Whittington A. (2018) *Textural, Thermal, and Topographic Constraints on Lava Flow System Structure: the December 2010 Eruption of Piton de La Fournaise*. Bulletin of Volcanology, 80:74. DOI: 10.1007/s00445-018-1246-9
<https://link.springer.com/article/10.1007/s00445-018-1246-9>
 2. **Soldati A.**, Beem J., Gomez F., Huntley J., Roberts T., Whittington A. (2017) *Emplacement Dynamics and Timescale of a Holocene Flow from the Cima Volcanic Field (CA): Insights from Rheology and Morphology*. Journal of Volcanology and Geothermal Research, 347, 91–111. DOI: 10.1016/j.jvolgeores.2017.09.005
<http://www.sciencedirect.com/science/article/pii/S0377027317301142>
 1. **Soldati A.**, Sehlke, A., Chigna, G., & Whittington, A. (2016). *Field and experimental constraints on the rheology of arc basaltic lavas: the January 2014 Eruption of Pacaya (Guatemala)*. Bulletin of Volcanology, 78(6):43. DOI: 10.1007/s00445-016-1031-6
<https://link.springer.com/article/10.1007/s00445-016-1031-6>
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CONFERENCE ABSTRACTS

- Soldati A.***, Hansteen T. H., Hansclevier J., Dingwell D. B. (2020) MORB Rheology: Experimental Insights on the Mid-Atlantic Ridge. Abstract presented (talk) at Physics of Volcanoes, Hamburg, DE, 11-12 Feb.
- Whittington A.*, Morrison A., Sehlke A., **Soldati A.** (2019) *Morphological and rheological constraints on the emplacement of basaltic lava flows, and implications for hazard assessment*. Abstract to be presented at the Volcanism and Distributed Volcanic Hazards Chapman Conference, Flagstaff, AZ, 16-20 Mar.
- Soldati A.***, Dingwell D., Houghton (2019) *Insights from Disequilibrium and Equilibrium Crystallization Rheological Experiments on the 2018 Kilauea LERZ Eruptive Sequence* Abstract 540819 presented (poster) at AGU Fall Meeting, San Francisco, CA, 9-13 Dec.
- Roman D.*, Shiro B., **Soldati A.** (2019) *VT fault-plane solution orientations as a precursory indicator of lava viscosity during the May 2018 Leilani Estates eruption at Kilauea Volcano, Hawai'i* Abstract presented (poster) at AGU Fall Meeting, San Francisco, CA, 9-13 Dec.
- Soldati A.***, Dingwell D., Houghton B. (2019) *The evolving rheology of basaltic lava flows* Abstract 158 presented (talk) at Society of Rheology Annual Meeting, Raleigh, NC, 20-24 Oct.
- Soldati A.***, Dingwell D., (2019) *Advances in Two-Phase Magma Rheology* presented (talk) at Silicate Melts Workshop, La Petite Pierre, France, 1-5 Oct.

Whittington A.*, Halverson B., Kenderes S., Morrison A., Sehlke A., **Soldati A.** (2019) *The rheological path of solidifying magma: controls, feedback relations, and end-member scenarios* Abstract 338625 to be presented at GSA Annual Meeting, Phoenix, AZ, 23-27 Sept.

Soldati A.*, Sakimoto S., Houghton B., Dingwell D. (2019) *The Effect of Crystal Orientation on Lava Rheology: Insights from Laboratory Experiments and Multiphysics Modeling* Abstract IUGG19-2143 presented (talk) at IUGG General Assembly, Montreal, CN, 8-18 July.

Sakimoto S.*, **Soldati A.**, Houghton B., Dingwell D. (2019) *Multiphysics Modeling of Temperature, Flow velocity, Strain Rates, and Crystal Orientation in Rheological Experiments: an Improved Understanding of Experimental Conditions* Abstract IUGG19-3134 presented (talk) at IUGG General Assembly, Montreal, CN, 8-18 July.

Soldati A.*, Dingwell D., Houghton B., Mueller S. (2019) *Rheological variability of the 2018 Kilauea eruption* Abstract 7431 presented (talk) at EGU General Assembly, Wien, AUS, 7-12 Apr.
<https://meetingorganizer.copernicus.org/EGU2019/EGU2019-7431.pdf>

Soldati A.*, Dingwell D., Houghton B., Mueller S. (2019) *Rheological variability of the 2018 Kilauea eruption* presented (talk) at Physics of Volcanoes, Laacher See, DE, 27 Feb.-2 Mar.

Graettinger A.*, Oppenheimer J., **Soldati A.**, Befus K., Sonder I. (2018) *Insights into volcanic crater morphology and proximal deposits from multi-blast large scale experiments at University at Buffalo NSF Collaborative Blast Workshop* presented (poster, invited) at AGU Fall Meeting, Washington, DC, 10-14 Dec.

Soldati A.*, Sant C., Farrell J., Karson J. (2018) *The effect of bubbles on the rheology of lava flows: insights from large-scale two-phase experiments* presented (poster) at AGU Fall Meeting, Washington, DC, 10-14 Dec.

<https://fallmeeting.agu.org/2018/abstract/the-effect-of-bubbles-on-the-rheology-of-lava-flows-insights-from-large-scale-two-phase-experiments/>

Soldati A.*, Beem J., Chigna G., Gomez F., Gurioli L., Harris A., Huntley J., Rhéty M., Robertson T., Sehlke A., Villeneuve N., Whittington (2018) *The effect of topography on the rheological and morphological evolution of basaltic lava flows* presented (eLightning, invited) at AGU Fall Meeting, Washington, DC, 10-14 Dec.

<https://fallmeeting.agu.org/2018/abstract/the-effect-of-topography-on-the-rheological-and-morphological-evolution-of-basaltic-lava-flows/>

Soldati A.*, Harris A., Gurioli L., Villeneuve N., Rhéty M., Gomez F., Whittington A. (2018) *Textural, Thermal, and Topographic Constraints on Lava Flow System Structure: the December 2010 Eruption of Piton de La Fournaise* presented (poster) at COV10, Naples, IT, 3-7 Sept.

Farrell J.*, Karson J., **Soldati A.** (2018) *Structure-from-motion photogrammetry applied to morphologic studies of natural and experimental basaltic lava flows* presented (poster) at 2018 GSA Northeastern Section, Burlington, VT, 18–20 Mar.

Soldati A.*, Beem J., Robertson T., Gomez F., Huntley J., Whittington A. (2017) *Reconstructing a Monogenetic Eruption: Rheology and Morphology of a ~7ka Flow from the Cima Volcanic Field (CA)* presented (talk) at AGU Fall Meeting, New Orleans, LA, 11-15 Dec.

<http://adsabs.harvard.edu/abs/2017JVGR...347...91S>

Velázquez L. C.*, Qin Z., Suckale J., **Soldati A.**, Rust A., Cashman K. V. (2017) *Modeling of Gas Slug Break-up in the Lava Lake at Mt. Erebus, Antarctica* presented at AGU Fall Meeting, New Orleans, LA, 11-15 Dec.

<http://adsabs.harvard.edu/abs/2017AGUFM.V31C0517V>

Soldati A.*, Beem J., Robertson T., Gomez F., Huntley J., Whittington A. (2017) *Reconstructing a Monogenetic Eruption: Rheology and Morphology of a ~7ka Flow from the Cima Volcanic Field (CA)*, Abstract 300206 presented (talk) at GSA Annual Meeting, Seattle, WA, 22-25 Oct.

<https://gsa.confex.com/gsa/2017AM/webprogram/Paper300206.html>

Soldati A.*, Harris A., Gurioli L., Villeneuve N., Rhéty M., Whittington (2017) *Does lava remember its own thermal history? A new experimental approach to investigate subliquidus rheology applied to the December 2010 eruption of Piton de La Fournaise (La Réunion)*, Abstract ME51A-5 presented (talk) at 2017 IAVCEI General Assembly, Portland, OR, 14-18 Aug.

Whittington A.*, **Soldati A.**, Beem J., Robertson T., Gomez F. (2017) *Reconstructing a Monogenetic Eruption: Rheology and Morphology of a ~7ka Flow from the Cima Volcanic Field (CA)*, Abstract VH43A-151 presented (poster) at 2017 IAVCEI General Assembly, Portland, OR, 14-18 Aug.

Soldati A.*, Harris A., Gurioli L., Villeneuve N., Rhéty M., Whittington A. (2017) *Lava-topography interactions: the December 2010 Eruption of Piton de La Fournaise (La Réunion)* presented (talk) at 2017 Humboldt Colloquium, Washington D.C., 2-4 Mar.

Soldati A.*, Harris A., Gurioli L., Villeneuve N., Rhéty M., Whittington A. (2016) *Topographic Constraints on Lava Flow Patterns: the December 2010 Eruption of Piton de La Fournaise (La Réunion)*, Abstract V52A-06 presented (talk) at 2016 AGU Fall Meeting, San Francisco, CA, 12-16 Dec.
<http://adsabs.harvard.edu/abs/2016AGUFEM.V52A..06S>

Whittington A.*, **Soldati A.**, Sehlke A., Robert B., Médard E., Harris A., Gurioli L., Chigna G. (2016) *Lava flow morphology as a proxy for lava flow rheology: mapping rheological transitions in basaltic lava flows*, presented (poster) at 3rd Workshop on Volcano Geology, Sicily, Italy, 3-10 July.
https://vhub.org/resources/4090/download/3Workshop_on_Volcano_Geology_2016_Abstract_book.pdf

Soldati A.*, Beem J., Robertson T., Gomez F., Whittington A. (2015) *Rheology and Morphology of a Trachybasaltic Lava Flow: a Case Study from the Cima Volcanic Field (CA)*, Abstract V41B-3072 presented (poster) at 2015 AGU Fall Meeting, San Francisco, CA, 14-18 Dec.
<http://adsabs.harvard.edu/abs/2015AGUFEM.V41B3072S>

Soldati A.*, Beem J., Robertson T., Gomez F., Whittington A. (2015) *Rheology and Morphology of a Trachybasaltic Lava Flow: a Case Study from the Cima Volcanic Field (CA)*, presented (talk) at 10th Silicate Melts Workshop, La petite Pierre, France, 13-17 Oct.

Soldati A.*, Sehlke A., Bollasina A., Chigna G., Whittington A. (2015) *Field and experimental constraints on the rheology of arc basaltic lavas: the January 2014 Eruption of Pacaya (Guatemala)*, presented (poster) at 10th Silicate Melts Workshop, La petite Pierre, France, 13-17 Oct.
<http://adsabs.harvard.edu/abs/2015AGUFEM.V41B3072S>

Soldati A.*, Sehlke A., Bollasina A., Chigna G., Whittington A. (2014) *The January 2014 Eruption of Pacaya (Guatemala): Rheology and Morphology through Field Observations and Laboratory Experiments*, Abstract V13C-4793 presented (poster) at 2014 AGU Fall Meeting, San Francisco, CA, 15-19 Dec.
<http://adsabs.harvard.edu/abs/2014AGUFEM.V13C4793S>

Beem J.*, Luecke A., Polun S., Robertson T., Savage A., **Soldati A.**, Whittington A., Gomez P. (2014) *Holocene flows of the Cima volcanic field, Mojave Desert, Part 1: Remote sensing and flow morphology from micro to macro scales*, Abstract V13C-4790 presented (poster) at 2014 AGU Fall Meeting, San Francisco, CA, 15-19 Dec.
<http://adsabs.harvard.edu/abs/2014AGUFEM.V13C4790B>

Robertson T.*, Sehlke A., **Soldati A.**, Beem J., Gomez P., Whittington A. (2014) *Holocene flows of the Cima volcanic field, Mojave Desert, Part 2: Flow rheology from laboratory measurements*, Abstract V13C-4791 presented (poster) at 2014 AGU Fall Meeting, San Francisco, CA, 15-19 Dec.
<http://adsabs.harvard.edu/abs/2014AGUFEM.V13C4791R>

Whittington A.*, Bollasina A., Sehlke A., **Soldati A.**, Hofmeister A. (2014) *Thermo-rheological studies of lava flows*, Abstract cov8-abs-130 (poster) presented at Cities on Volcanoes 8, Yogyakarta, Indonesia, 9-13 Sept.

Soldati A.*, Cashman K. V., Rust A., Rosi M. (2013) *Bubble rise and break-up in volcanic conduits*, Abstract V13H-06 (talk) presented at 2013 AGU Fall Meeting, San Francisco, CA, 9-13 Dec.
<http://adsabs.harvard.edu/abs/2013AGUFEM.V13H..06S>

Cashman K.*, Rust A., Belien I., Oppenheimer J., **Soldati A.** (2013) *Crystals modulate non-explosive gas transfer at Stromboli volcano*, *Italy Mineralogical Magazine* 77(5) 837, presented (talk) at Goldschmidt, Florence, IT, 25-30 Aug.
<https://www.goldschmidtabstracts.info/abstracts/abstractView?id=2013004323>

* presenting author

INVITED TALKS

- 2020 *The evolving rheology of lava flows* University of Pennsylvania (PA, U.S.A. - remote)
Hot soft rock on the move: the rheology of lava flows Princeton University (NY, U.S.A.)
Volcanoes: shaping the environment we live in North Carolina State University (NC, U.S.A.)
 2019 *2019 Volcanic Activity Report: Theresienstrasse 41* Ludwig-Maximilians-Universität München (DE)
Experimental Insights into the Two-phase Rheology of Magmas The University of Manchester (UK)
The Rheology of Flowing Basalt University of Freiburg (DE)
The Influence of Topography on Lava Flow Emplacement Ludwig-Maximilians Universität München (DE)
The Effect of Bubbles on the Rheology of Lava Flows: Insights from Large-Scale Two-Phase Experiments Durham University (UK)
Weaving between phenocrysts and microlites: a melt's downhill journey Ludwig-Maximilians Universität München (DE)
- 2017 *Concentric Cylinder Rheometry: uncertainties assessment & implications for data interpretation* Ludwig-Maximilians Universität München (DE)
Going with the Flow: How does Lava do it? Syracuse University (NY, U.S.A.)
- 2016 *Basaltic Lava Flows at Piton de la Fournaise: a Rheological Perspective* OVPF (La Réunion)
4D Rheological and Morphological Evolution of Basaltic Lava Flows, University of La Réunion
- 2015 *Rheological Evolution of Basaltic Flows* MU Geology Department Colloquium (MO, U.S.A.)
- 2014 *Estudio de la Reologia de Lavas (Pacaya y Fuego)* CESEM (Guatemala City, GT)
- 2013 *Bubble Rise and Break Up in Volcanic Plumbing Systems* INGV – Pisa (Pisa, IT)

PROFESSIONAL DEVELOPMENT

- 2018 *Volcano Hazards Field-Scale Experiment* workshop, State University at Buffalo. (NY, U.S.A.)
- 2017 *Ash-related Issues in Gas Turbines* workshop, Ludwig-Maximilians Universität München (DE)
http://www.en.mineralogie.geowissenschaften.uni-muenchen.de/news/international_workshop/index.html
- 2016 *Melts, Glasses, Magmas* workshop, Ludwig-Maximilians Universität München (DE)
- 2015 *Grant Proposal Writing* workshop, Smithsonian Institution (Washington, D.C., U.S.A.)
Thermodynamic modeling with alpha-MELTS workshop, University of Maryland (MD, U.S.A.)

FIELD EXPERIENCE

- | | | duration |
|------|---|----------|
| 2016 | Piton de la Fournaise (La Réunion, French DOM)
<i>dissertation field work on inactive lava flows; aid to gas monitoring and geophysical investigations</i> | 3 months |
| 2014 | Cima Volcanic Field (California, U.S.A.)
<i>dissertation field work on inactive lava flow: sampling, drone surveying</i> | 1 week |
| | Arenal and Poas (Costa Rica)
<i>dissertation field work on inactive lava flows: sampling, mapping</i> | 1 week |
| | Pacaya and Fuego (Guatemala)
<i>dissertation field work on active and inactive lava flows: sampling, mapping</i> | 2 weeks |
| 2012 | Corsica (France)
<i>field trip focused on alpine orogeny and metamorphism</i> | 1 week |
| 2011 | Aeolian Islands (Italy)
<i>field trip focused on calc-alkaline volcanism and volcano monitoring</i> | 1 week |
| 2010 | Tuscan Magmatic Province (Italy)
<i>field trip focused on potassic and ultrapotassic volcanism</i> | 1 week |
| 2009 | Ormea (Northern Italy)
<i>field trip focused on geological mapping of sedimentary, volcanoclastic, and metamorphic lithologies</i> | 1 week |

LABORATORY EXPERIENCE

Large-scale lava flows (Syracuse Lava Project)
 Large-scale blasts (Buffalo Center for Geohazards Studies)
 High-temperature viscometry (concentric cylinder and parallel plate)
 Differential Scanning Calorimetry (DSC)
 Synchrotron (PSI-TOMCAT)
 Scanning Electron Microscope (SEM)
 Electron Micro Probe Analyzer (EMPA)
 Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS)
 Helium Pycnometry

COMPUTATIONAL EXPERIENCE

Statistical analysis (PAST)
 Monte Carlo Simulations (Excel)
 Particle Image Velocimetry (Tracker, PIVlab)
 Structure from Motion (Agisoft Photoscan Pro, CloudCompare)
 Image processing (ImageJ, JMicroVision)
 Thermodynamic modeling (MELTS, PELE, MATLAB)

AWARDS

- 2018 MU Geology Graduate Students Society *Spring Research Forum*, 1st place
 2017 American Geophysical Union *Outstanding Student Paper Award*, VGP session
<https://membership.agu.org/ospawinner/arianna-soldati-2/>
 MU Geology Department *Outstanding Graduate Student Award*
 MU GPC *Research and Creative Activities Forum (RCAF)*, 1st place
 2013 American Geophysical Union *Outstanding Student Paper Award*, VGP session
<https://membership.agu.org/ospawinner/arianna-soldati/>
 Cabot Institute *Natural Systems and Processes Poster Session*, Masters Student Year Prize
<http://seis.bris.ac.uk/~tb7779/nspps/pastevents.html>
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FELLOWSHIPS AND GRANTS

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|------|---|----------|
| 2019 | <i>Newton International Fellowship</i> (Royal Society, UK) [declined to accept current position] | £ 99,000 |
| 2018 | <i>Humboldt Postdoctoral Research Fellowship</i> (Humboldt Foundation, DE) | € 95,000 |
| | <i>Cities on Volcanoes 10 Travel Grant</i> | € 400 |
| 2017 | Graduate and Professional Council <i>Travel Grant</i> (MU) | \$ 300 |
| | John D. Bies <i>Professional Presentation Travel Scholarship</i> (MU) | \$ 400 |
| | Organization Resource Group <i>Travel Grant</i> (MU) | \$ 400 |
| | Geological Society of America North Central section <i>Travel Grant</i> | \$ 80 |
| | Geological Society of America <i>On To The Future Grant</i> | \$ 550 |
| 2016 | Graduate Students Association <i>Travel Grant</i> (MU) | \$ 185 |
| | Graduate and Professional Council <i>Travel Grant</i> (MU) | \$ 400 |
| | American Geophysical Union <i>Student Travel Grant</i> | \$ 500 |
| | John D. Bies <i>International Travel Scholarship Award</i> (MU) | \$ 900 |
| | National Geographic <i>Young Explorer Grant</i> | \$ 5,000 |
| | https://www.nationalgeographic.org/find-explorers/explorers/7323AF7D/arianna-soldati | |
| | <i>Chateaubriand STEM Fellowship</i> (FR Embassy in the U.S.) | € 4,500 |
| | https://www.chateaubriand-fellowship.org/Arianna-Soldati.html | |
| 2015 | Geology Department <i>Travel Fund</i> (MU) | \$ 350 |
| | Graduate and Professional Council <i>Travel Grant</i> (MU) | \$ 500 |
| | Organization Resource Group <i>Travel Grant</i> (MU) | \$ 780 |

2014-8	<i>Huggins Fellowship</i> (MU) [university-wide competitive fellowship]	\$ 40,500
2013	American Geophysical Union <i>Student Travel Grant</i>	\$ 500
	<i>Thesis Abroad Fellowship</i> (University of Pisa)	€ 3,500
2012	<i>Erasmus Placement</i> (EU)	€ 1,500
2010	<i>Erasmus</i> (EU)	€ 1,750

PROFESSIONAL MEMBERSHIPS

European Geophysical Union
American Geophysical Union
Geological Society of America
International Association of Volcanology and Chemistry of the Earth's Interior

TEACHING AND MENTORING

TEACHING EXPERIENCE – UNDERGRADUATE LEVEL

		format	enrollment
2019	<i>Volcanoes: the Sublime and the Scientific</i> (guest lecturer), NYU & CUNY	one class	50
2017	GEOL 1400 <i>Themes in Geology: Volcanoes</i> (instructor of record), MU	5 weeks	215
2014	ITA 2160 <i>Intermediate Italian</i> (instructor of record), MU	semester	25

TEACHING EXPERIENCE – GRADUATE LEVEL

		format	enrollment
2019	<i>Geothermometry and Geobarometry with MELTS</i> (instructor of record), LMU	4 weeks	5
	<i>Melts, Glasses, Magmas</i> (teaching assistant), LMU	5 days	30
2018	GEOL 7200 <i>Topics in Geology: Volcanology</i> (guest lecturer), MU	one class	7
2015-8	ONITA <i>International Teaching Assistants Program</i> (teaching assistant), MU	3 days	~10/class

MENTORING EXPERIENCE

2019	MaLin, Ph.D. student
2018	Garima Lohani, visiting M.Sc. student

PROFESSIONAL DEVELOPMENT

2018	<i>Teaching Renewal Week</i> , MU (MO, U.S.A.)
2017	<i>Celebration of Teaching</i> conference (MO, U.S.A.) <i>Teaching Renewal Week</i> , MU (MO, U.S.A.)
2015	<i>Entering Mentoring</i> workshop series, MU (MO, U.S.A.) <i>Celebration of Teaching</i> conference (MO, U.S.A.)
2014	<i>Faculty Shadowing</i> of Earth Sciences Prof. M. Barquero-Molina at MU (Columbia, MO) and Environmental Science Prof. W. Romine at Missouri Valley College (Marshall, MO)

AWARDS

2018	Sandra K. Abell Science Education Award
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OUTREACH AND ADVOCACY

LEADERSHIP

- 2019 *ComSciCon-AIP* Organizing Committee Chair (College Park, DC)
<https://comscicon.com/comscicon-aip-2019>
 15X4 Speaker Training Team (Munich, DE)
<https://munich.15x4.org/>
 Twitter account @LMU_Volc Manager
 Mattel Dream Gap Project Role Model
- 2017 *Science on Wheels* Founder (rural Missouri)
<https://scienceonwheelsmissouri.wordpress.com/>
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PUBLIC TALKS

		age	attendance
2020	The Cinema High School <i>Volcano Q&A</i> (New York, NY via Zoom)	11 th	~ 75
	Vulcani d'altri mondi <i>Planetarium conference series</i> (Milano, IT)	open	~ 100
	Humboldt Salon <i>Lab Volcanoes</i> (Munich, DE)	adults	~ 40
2019	Mattel & National Geographic <i>Scopriamo i Vulcani</i> (Napoli, IT)	7-12	~ 100
	<i>Virtual Volcano Observatory</i> (New York City, NY)	open	~ 40
	Journey to the surface of the Earth <i>Munich Science Slam</i> (Munich, DE) https://www.youtube.com/watch?v=WfoBk0ppG0w	open	~ 100
	We all come from hell <i>Lightning Talks Munich</i> (Munich, DE) https://www.youtube.com/watch?v=689FAWJvYac	open	~ 100
	Vulcani d'altri mondi <i>Planetarium conference series</i> (Milano, IT) https://lofficina.eu/?event=vulcani-daltri-mondi	open	~ 70
2018	South Callaway Elementary <i>GeoReach</i> (Columbia, MO)	2 nd grade	~ 45
	Volcanoes: shaping the world as we know it <i>Beyond Campus</i> (KC, MO) https://coas.missouri.edu/news/beyond-campus-kc-2018	open	~ 200
2017	South Callaway Elementary <i>GeoReach</i> (Columbia, MO)	2 nd grade	~ 45
	<i>Science Blitz</i> (Columbia, MO)	open	~ 60
	<i>Science Festival</i> (Columbia, MO)	open	~ 500
	Microsoft & National Geographic <i>MakeWhatsNext</i> initiative (Kansas City, MO) http://press.nationalgeographic.com/2017/03/17/media-alert-national-geographic-partners-with-microsoft-on-makewhatsnext-workshops/	10-15	~ 20
	Topographic Controls on Lava Flow Emplacement <i>RCAF</i> (Columbia, MO)	college	~ 20
	Volcanoes: the Makers of Land <i>Science on Tap</i> (Columbia, MO) https://www.facebook.com/events/200285903782469/	college	~ 50
2016	Living in a Viscous World <i>Saturday Morning Science</i> (Columbia, MO) https://www.youtube.com/watch?v=kKzPWBYkKm4	seniors	~ 50
	St. Louis Science Center <i>Rocks Quakes and Fossils</i> (St. Louis, MO)	open	~ 4,000
	<i>Going with the Flow: How does Lava do it?</i> National Geographic (D.C., U.S.A.)		
2015	<i>Three Minute Thesis (3MT®)</i> , regional finals (Charlotte, NC) https://www.youtube.com/watch?v=tZTq-tY1U_4&feature=youtu.be	open	~ 100
	<i>Three Minute Thesis (3MT®)</i> , MU tournament (Columbia, MO) https://www.youtube.com/watch?v=82IIDTtyuJA&index=6&list=PLU9gsfwbDA84y62-7AiwkirGR0qWrV718	open	~ 50
	<i>The Great Shakeout</i> (Columbia, MO)	college	~ 200
	<i>Science Sleuth</i> Family Science Day (Columbia, MO)	K-5	~ 500
	Adventure Club <i>STEAM night</i> (Columbia, MO)	K-5	~ 200
	C. M. Russel High School <i>Career Talk</i> (Great Falls, MT via Skype)	12 th grade	~ 100
	Columbia Homeschool Educators <i>Science Fair</i> (Columbia, MO)	K-12	~ 200

	Lee Elementary School <i>Science ARTreach</i> (Columbia, MO)	5 th grade	~ 60
	Rock Bridge Middle School <i>STEM EXPO</i> (Columbia, MO)	K-12	~ 600
2014	<i>Art in the Park</i> science booth (Columbia, MO)	open	~ 500
	<i>Science Quest</i> (Columbia, MO)	5 th grade	~ 400
	Cub Scouts <i>Volcanoes Talk</i> (Columbia, MO)	K-5	~ 600
	Rock Bridge Middle School <i>Forces of Nature</i> (Columbia, MO)	K-12	~ 600
2013	Sturgess High School <i>Career Talk</i> (Sturgess, MO)	12 th grade	~ 30
	Rock Bridge Middle School <i>Forces of Nature</i> (Columbia, MO)	K-12	~ 600
2012	At-Bristol Science Center <i>Volcano Lab</i> (Bristol, U.K.)	open	~ 2,000
	INGV <i>Information Centre Volunteer</i> (Vulcano, Italy)	open	~ 100

WRITTEN PIECES

- 2019 Chocolate University Online *The Surprising Link Between Chocolate and Lava* blog post
<https://www.chocolateuniversityonline.com/the-surprising-link-between-chocolate-and-lava/>
 Massive Science *Women of Science Tarot Deck* (two women scientists profiles)
<https://massivesci.com/notes/science-tarot-deck-occult-pseudoscience/>
<https://massivesci.com/articles/cecilia-payne-gaposchkin-hydrogen-helium-universe/>
<https://massivesci.com/articles/alice-wilson-geology-paleontology-science-hero/>
- 2018 National Geographic *Absolute Expert: Volcanoes* kids book (scientific expert)
<https://www.amazon.com/Absolute-Expert-Volcanoes-Lela-Nargi/dp/1426331428>
 Scientific American *The floor is (usually) not lava* op-ed
<https://blogs.scientificamerican.com/observations/the-floor-is-usually-not-lava/>
 CNN *Volcanologist: Why Guatemala's volcano is so lethal* article
<https://www.cnn.com/2018/06/06/opinions/why-guatemalas-volcano-is-so-lethal-soldati/index.html>
 CNN *Geologist: it's not just lava making the volcano blow* article
<https://www.cnn.com/2018/05/25/opinions/volcano-lava-water-explosive-reaction-soldati/index.html>
 CNN *How the 50th state is forged in fire* article
<https://www.cnn.com/2018/05/16/opinions/kilauea-forge-hawaii-fire-soldati/index.html>
 Union of Concerned Scientists *Meeting a Scientist Right in Your Hometown* blog post
<https://blog.ucsusa.org/science-blogger/science-on-wheels-meeting-a-scientist-right-in-your-hometown>
 National Geographic Voices *Volcanoes are very misunderstood: here's why* blog post
<https://blog.nationalgeographic.org/2018/03/06/volcanoes-are-very-misunderstood-heres-why/>
 GSA Speaking of Geoscience *Granite intrusions: the record-keepers of volcanic system* blog post
<https://speakingofgeoscience.org/2018/02/28/granite-intrusions-the-record-keepers-of-volcanic-systems/>
 GSA Speaking of Geoscience *Slab windows through time* blog post
<https://speakingofgeoscience.org/2018/02/26/slab-windows-through-time/>
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CONFERENCE ABSTRACTS

- Soldati A.*** (2019) *ComSciCon-AIP* presented (poster) at AIP Assembly of Society Officers, College Park MD, 28 Mar.
- Soldati A.*** (2018) *What happens to moving soft rock when the ground goes down?* presented (talk, Upgoer 5 challenge) at AGU Fall Meeting, Washington, DC, 10-14 Dec.
<https://fallmeeting.agu.org/2018/abstract/what-happens-to-moving-soft-rock-when-the-ground-goes-down/>
- Soldati A.*** (2018) *Who says my volcano is blowing up?* presented (workshop) at Mozilla Festival, London, UK, 26-28 Oct.
<https://guidebook.com/guide/147793/event/21682481/>
- Soldati A.*** (2017) *Science on Wheels: SoWing interest in science in rural Missouri*, Abstract 300356 presented (poster) at GSA Annual Meeting, Seattle, WA, 22-25 Oct.

<https://gsa.confex.com/gsa/2017AM/webprogram/Paper300356.html>

PROFESSIONAL DEVELOPMENT

- 2018 NSF STEM Ambassadors Program (long-distance cohort)
<http://www.stemap.org/>
 Harvard University *ComSciCon National Workshop* (Boston, MA)
<https://comscicon.com/comscicon18-workshop>
 AAAS *Catalyzing Advocacy in Science and Engineering* workshop (Washington, D.C., U.S.A.)
<https://www.aaas.org/page/about-case>
- 2017 GSA Annual Meeting *Science Communication Internship* (Seattle, WA)
<https://www.geosociety.org/GSA/News/intern/GSA/News/sci-comm-intern.aspx?hkey=87605619-77f9-47ee-9081-a3a55290577e>
 NSF *Decoding Science* program (MO, U.S.A.)
https://www.researchgate.net/publication/322468385_Decoding_Science_Development_and_Evaluation_of_a_Science_Communication_Training_Program_Using_a_Triangulated_Framework
 National Geographic *Sciencetelling®* bootcamp (Washington, D.C., U.S.A.)
<https://www.nationalgeographic.org/projects/sciencetelling-bootcamp/>
-

AUDIO & VIDEO MEDIA

- 2020 Janine Krippner's *Volcano moments* YouTube video
<https://www.youtube.com/watch?v=ikP5T-8Uopg>
 National Geographic Learning *written, audio and video content*, Voices (adult ESL textbook)
- 2019 Wo Bist Dude *Truth in magma* vlog
https://www.youtube.com/watch?v=6_KNgGkrmkY
 The Amoeba People *Episode 2: Volcanoes with Arianna Soldati* podcast
<https://www.youtube.com/watch?v=drFDYZSZvTc>
 National Geographic Learning *Chapter Opener Video*, Earth and Space Science high school textbook
- 2018 CTV News Channel (Ontario, Canada) *Krakatoa tsunami* live TV interview
 The Roving Naturalist *Explain Yourself* YouTube video
<https://www.youtube.com/watch?v=bpurAaEx-l0&feature=youtu.be>
 CTV News Channel (Ontario, Canada) *Kilauea eruption* live TV interview
<https://www.ctvnews.ca/world/excited-and-scared-hawaii-volcano-spews-huge-cloud-of-ash-1.3933981>
 900CHML (Hamilton, Ontario, Canada) *Kilauea eruption* live radio interview
- 2017 KBIa Radio (Columbia, MO) Radio Friends with Paul Pepper *Volcano Talk* radio interview
<http://kbia.org/post/paul-pepper-februarys-science-tap-como-caitlin-chisham-and-michael-straw-caitlin-sings>
 KRES Radio (Moberly, MO) *Science on Wheels* radio interview
 KRMS Radio (Ozarks, MO) *Science on Wheels* radio interview
-

MEMBERSHIPS

SciLine <https://www.sciline.org>
 500 Women Scientists <https://500womenscientists.org/>

MEDIA COVERAGE

- 2020 Io Donna
 RaiNews24

- 2019 Assolombarda
<https://www.assolombarda.it/steamiamoci/le-protagoniste-del-futuro/arianna-soldati-vulcanologa-national-geographic-young-explorer-2015-ricercatrice-e-humboldt-fellow-preso-12019universita-lmu-di-monaco>
 National Geographic Traveler Magazine *Discover the best places to witness the wonder of volcanoes*
<https://www.nationalgeographic.com/travel/travel-interests/active-and-adventure/an-explorers-guide-to-volcanoes/?cmpid=org=ngp::mc=social::src=facebook::cmp=editorial::add=fb20190424science-volvanodestinations::rid=&sf211554759=1&fbclid=IwAR1TZ8UsxjYJRavBDncHZrZ3fGNTcbBZEGxC4O5ZO7ECi-9IXYb0UInxq8c>
- 2018 Council of Graduate Schools *Science Isn't Just Something that Happens in Labs*
<http://cgsnet.org/gradimpact-science-isn%E2%80%99t-just-something-happens-labs>
 Mental Floss *11 Secrets of Volcanologists*
<http://mentalfloss.com/article/533613/job-secrets-of-volcanologists>
 MU Graduate Student Spotlight *Arianna Soldati & Science on Wheels*
<https://gradstudies.missouri.edu/about/news-events/news-features/2018/grad-student-spotlight-2/>
- 2017 STL Public Radio *Scientific curiosity isn't just for cities; MU researchers bring science to rural towns*
<http://news.stlpublicradio.org/post/scientific-curiosity-isnt-just-cities-mizzou-researchers-bring-science-rural-towns#stream/0>
 The Maneater *Graduate student takes science to rural communities in Missouri*
<https://www.themaneater.com/stories/uwire/graduate-student-takes-science-rural-communities-m>
 Mizzou News *Taking the show on the road*
<https://news.missouri.edu/2017/taking-the-show-on-the-road-with-science-on-wheels/>
 AGU Facebook Live Stream from the SU Lava Project (Syracuse, NY)
<https://www.facebook.com/AmericanGeophysicalUnion/videos/10154150420776601/>
<https://www.facebook.com/AmericanGeophysicalUnion/videos/10154150499646601/>
<https://www.facebook.com/AmericanGeophysicalUnion/videos/10154150514021601/>
 Decoding Science #IAmScience
<https://decodingscience.missouri.edu/2017/02/15/arianna-soldati-iamscience/>
 Mizzou Alumni Magazine *Boiling Down Lava*
- 2015 Smithsonian Science Education Center *Earthworms, volcanoes, and what it means to be a scientist*
<https://ssec.si.edu/stemvisions-blog/earthworms-volcanoes-and-what-it-means-be-scientist>

AWARDS

- 2015 MU *Three Minute Thesis* (3MT®), 1st place
<https://politicalscience.missouri.edu/news/2015-winners-mizzou-3mt%C2%AE>

SERVICE AND LEADERSHIP

PROFESSIONAL COMMUNITY LEVEL

		role
2020	NASA (FINESST) Chemical Geology	Proposal reviewer Manuscript reviewer
2018-9	Annals of Geophysics, AGU Books, JGR-Planets, JGR-Solid Earth, Geoscience Communication	Manuscript reviewer
2019	GSA Membership Committee	Early Career member
2018	AGU Fall Meeting, large scale volcanology experiments session	Co-convener
2017	GSA Annual Meeting, volcanology and petrology session IAVCEI General Assembly, lava flow dynamics and hazard assessment session	Chair Co-convener

UNIVERSITY LEVEL

		role
2018	MU Graduate and Professional Council GPC Student Affairs Committee	Secretary Leader
2017	MU Graduate and Professional Council	At-large Representative
2015-6	MU Graduate and Professional Council	Department Representative
2015	MU Graduate Student Experience Task Force	International Student Representative

DEPARTMENT LEVEL

		role
2018	MU Geological Sciences Department Colloquium	MSA distinguished lecturer host
2015-7	MU Geology Graduate Students Society	Founder, President
2014-7	MU Geology Development Board	Student Member