JESSICA L.D. KAPP
Curriculum Vitae

Contact Information: 520-440-3247; jkapp@email.arizona.edu

PROFESSIONAL PREPARATION

2004 – Ph.D.	Geology	University of California, Los Angeles
1998 – M.S.	Geology	Vanderbilt University
1996 – B.S.	Geology	Syracuse University
1995	Field Camp	Indiana University Field Station

APPOINTMENTS

2012-present	Associate Department Head, Department of Geosciences, University of Arizona
2014-present	Senior Lecturer, Department of Geosciences, University of Arizona
2005 – 2014	Lecturer, Department of Geosciences, University of Arizona
2003 – 2005	High School Teacher, and Department Head for Math and Science Southgate Academy, Tucson, AZ. Phone: (520) 741 7900

AWARDS

1999 Outstanding Student Paper Award, American Geophysical Union
1996 Outstanding Senior Award, Department of Geology, Syracuse University

RESEARCH

Vanderbilt:
Igneous Petrology and (U-Th)-Pb zircon and monazite geochronology (MS research)
UCLA:
(U-Th)-Pb zircon and monazite geochronology, thermal modeling, field mapping (PhD research)
University of Arizona:
Geoscience Education – teaching in the large-lecture classroom (in collaboration with the U of A Center for Astronomy Education)
Teacher training for graduate students and post-docs (in collaboration with the U of A Center for Astronomy Education)
Thermal modeling of basins (in collaboration with ExxonMobil)
Detrital geochronology and thermochronology of Piceance Basin (in collaboration with ExxonMobil)

PUBLICATIONS

Kapp, J.L., Slater, S.J., Slater, T.F., Lyons, D.J., Manhart, K., Wehunt, M., and Richardson, R.M. (2011). Gaining *A Geological Perspective* by implementing

learner-centered teaching in the large lecture classroom. *Journal of College Teaching and Learning.*

Kapp, J.L., Harrison, T.M., Kapp, P., Grove, M., Lovera, O.M., and Ding, L. (2005). The Nyainqentanglha Shan: A window into the tectonic, thermal and geochemical evolution of the Lhasa block, southern Tibet. *Journal of Geophysical Research*, v. 110, B08413, doi:10.1029/2004JB003330.

Kapp, J.L.D., Miller, C.F., and Miller, J.S. (2002). Ireteba Pluton, Eldorado Mountains, Nevada: Late, Deep-Source, Peraluminous Magmatism in the Cordilleran Interior. *Journal of Geology*, v. 110, p. 649-669.

Townsend, K.T., Miller, C.F., **D'Andrea, J.L.**, Ayers, J.C., Harrison, T.M., and Coath, C.C. (2000). Low temperature replacement of monazite in the Ireteba granite, southern Nevada: Geochronological implications: *Chemical Geology*, 172: 95-112.

Harrison, T.M., Grove, M., Lovera, O.M., Catlos, E.J., and **D'Andrea, J.L.** (1999) The origin of Himalayan anatexis and inverted metamorphism: Models and constraints: *Journal of Asian Earth Sciences*, 17, 755-772.

ABSTRACTS/PRESENTATIONS

Spencer, C.J., Schleiffarth, W.K., and Kapp, J.L., (2016). Providing Direct-To-Consumer Outreach-The Traveling Geologist Case Study, AGU San Francisco Fall Meeting Town Hall.

Kapp, J.L., (2016): Odyssey Storytelling "Natural" at Flandrau Science Center.

Kapp, J.L., (2015): Lessons from the Tibetan Plateau, Presentation at Tucson Festival of Books Science City.

Kapp, J.L., (2015): Geologic Time: It's Real and it's Deep, Presentation at Saddlebrook Performing Arts Center for College of Science Science Café Lecture Series.

Kapp, J.L., Richardson, R.M., and Slater, S.J. (2008). Gaining a Geological Perspective Through Active Learning in the Large Lecture Classroom, *EOS Transactions,* 89(53), Abstract ED31A-0580.

Miller C.F., Barton, M., Miller, J.S., **Kapp, J.L.D.**, and Loflin, M. (2003). Peraluminous granites of the Cordilleran Interior, western USA: Hybrid magmas from deep, ancient crust. *Geological Society of America Abstracts with Programs*, v. 35, p. 18.

Kapp, J.L., Harrison, T.M., Grove, M., Kapp, P., Ding, L., and Lovera, O.M. (2002). Structural Constraints on the Evolution of the Nyainqentanglha Massif, Southeastern Tibet. *Eos Transactions*, Abstract T51B-1144.

Kapp, J.L.D., Harrison, T.M., and Grove, M. (2001). Evidence from the Nyainqentanglha Shan for a long-lived, lower crustal magmatic system in southern Tibet. *Eos Transactions,* Abstract T11E-0891.

D'Andrea, J.L., Harrison, T.M., Grove, M., and Lin, D. (2000). The thermal evolution of the Nyainqentanglha Shan: evidence for a long-lived, lower crustal magmatic system in southern Tibet. *15th Annual Himalaya-Karakorum-Tibet workshop Abstracts volume*, Graz, Austria.

D'Andrea, J.L, Harrison, T.M., Grove, M., Xinhua, Z. (1999). The Thermal and Physical State of the South Tibetan Middle Crust Between 20-8 Ma: U-Th-Pb and Nd Isotopic Evidence from the Nyainqentanglha Massif. *14th annual Himalaya-Karakorum-Tibet Workshop Abstracts volume*, Kloster-Ettal, Germany.

D'Andrea, J.L., Harrison, T.M., and Grove, M. (1999). The Post-Collisional Thermal and Compositional Structure of the Gangdese Arc, Nyainqentanglha, Southern Tibet. *Eos Transactions*, 80(46), F991.

D'Andrea, J.L., Miller, C.F., Miller, J.S. and Coath, C.D. (1999). Ireteba pluton, Eldorado Mountains, Nevada: Evidence for late, deep source, peraluminous magmatism in the Cordilleran Interior: *Geol. Soc. America, abst. with prog.* 31(6): A48.

Townsend, K.J., Miller, C.F., Ayers, J.C., **D'Andrea, J.L.**, Harrison, T.M., and Coath, C.D. (1999). Paragenesis of monazite in the Ireteba granite: Zoning and geochronological evidence for multiple generations of fluid-induced replacement: *Eos Transactions*, 80(17), p. S356.

Townsend, K.J., Miller, C.F., **D'Andrea, J.L.**, Ayers, J.C., Harrison, T.M., and Coath, C.D. (1998). Monazite replacement during modification of the Ireteba granite, southern Nevada: Geochronological implications: *Geol. Soc. America, abst. with prog.* 30(7): A214.

D'Andrea, J.L., Miller, C.F., and Ayers, J.C. (1997). Peraluminous Plutonism in the Colorado River Extensional Corridor, Southern NV: An Unusual Cretaceous, not Miocene, Intrusive Episode. *GSA annual meeting abstracts*.

Miller, C.F., **D'Andrea, J.L.**, Ayers, J.C., Coath, C.D., and Harrison, T.M. (1997). BSE imaging and ion probe geochronology of zircon and monazite from plutons of the Eldorado and Newberry Mountains, Nevada: Age, inheritance, and subsolidus modification: *Eos Transactions,* 78: F783.

TEACHING EXPERIENCE

Courses Taught

University of Arizona (2005-present)

NATS 101 (now Geos 170A1) – A Geological Perspective: Gen Ed covers scientific process, basic scientific laws and principles within the disciplines of astronomy, physics, and chemistry, and a focus on earth sciences. Emphasis on geosciences and society, including earthquakes, mass extinctions in geologic history, and global warming. Enrollment 300 – 1000 students per semester.

GEOS 397A – Teaching Geosciences: Prepares undergraduate NATS/Geos 170A1 preceptors for leading NATS/Geos 170A1 study sessions. Enrollment = 20 – 40 students per semester.

GEOS 255 – Historical Geology: Second course for majors after Intro. Physical Geology. Covers the geologic history of our planet using plate tectonic evidence and biological evidence, including formation of mountains, movement of plates and continental locations through time, and fossil progressions in the rock record. 20-40 students.

.

GEOS 195H – Science that Transforms: Class for honors students accompanying College of Science lecture series "Next"

Southgate Academy High School (2003 – 2005)

- Biology
- Chemistry
- Earth Science
- Algebra 1
- Algebra 2
- Geometry

* All of the above classes required curriculum development.

UCLA (1998 – 2001)

- Origin and Evolution of the Cosmos and Life – Teaching Fellow - This included developing curriculum, and creating and teaching a seminar course.
- Spectacular Places on Earth and the Geologic Processes that Contribute to their Formation - Teacher (Seminar course) - This was a course that I created, planned, and taught.
- Physical Geology – Teaching Assistant (Lab)
- Paleontology – Teaching Assistant (Lab)
- Dinosaurs – Teaching Assistant (Lab)

Vanderbilt University (1996 – 1998)

- Introductory Physical Geology - Teaching Assistant (Lab)
- Paleontology – Teaching Assistant (Lab)
- Petrology – Teaching Assistant (Lab)

Interview Footage:

- AZPM PBS Arizona Illustrated – "Texas Canyon" (2015)
- The Learning Channel – "Top Ten Natural Wonders" (2001)

SYNERGESTIC ACTIVITIES

- 2017: Transfer Student Center Faculty Fellow
- 2017: Head Judge, Geodaze Student Symposium
- 2017: Faculty Advisor, STEM Cats Community Outreach, Pima County Public Libraries, Martha Cooper Library
- 2016: Presenter at Odyssey Storytelling, October, Flandrau Science Center
- 2015 – Present: Contributor to TravelingGeologist outreach website
- 2015, 2016: Writers Read at Brewd Coffee House, Tucson, AZ
- 2015: Invited speaker at Science City Science Café at Tucson Festival of Books
- 2015 – Present – College of Science for-credit 100% Engagement Opportunities Proposal Review Committee
- 2015 - University of Arizona not-for-credit 100% Engagement Opportunities Proposal Review Committee
- 2014 – Present: Contributor to Huffington Post Education/Parenting/Contributor pages on huffingtonpost.com
- 2011 - 2014: Co-director, U of A Teaching Teams program
- 2011: Keynote speaker – Geoscience Saturday Academy

- 2011: Developed online course for STCH (Science Teacher Preparation) program Geos 401 – Geosciences Teaching Methods
- 2010 – 2014: Member, College of Science education and outreach committee
- 2010: Chair of College of Science service learning initiative committee
- 2010: Pearson “Essentials in Geology” – developing and writing Give It Some Thought sections for each chapter (inquiry-based questions for students).
- 2010: College of Science/TUSD committee on STEM education
- 2009: General Education for honors students committee
- 2008 – 2010: Teaching Faculty career path committee
- 2008 – 2009: Pima Community College Instructor search committee
- 2008-2010: Guest Lecture – "Sonora" – TRAD 104
- 2008: Pima Community College Earth Day Presenter
- 2008: Mentor for preceptor teaching workshop at University Teaching Center
- 2007: NSF Geoscience Education Panel Member
- 2007 – 2008: McGraw Hill "The Good Earth": Chapter reviewer and developed lectures supplementary to the textbook.
- 2006 – Present: Faculty advisor for Junior Education outreach project at the Tucson Gem and Mineral Show
- 2005-Present: Faculty co-advisor to the undergraduate geology club SESS (Society of Earth Science Students).