# Dolores A. van der Kolk

# Communications Coordinator | Sedimentologist & Stratigrapher

# Gulf Coast Carbon Center | Bureau of Economic Geology | dolores.vanderkolk@beg.utexas.edu

#### **Education**

# Ph.D., Geological Sciences, University of Texas at Austin, Jackson School of Geosciences

May 2016

Specialty: fluvial-deltaic, shallow marine, and shelf clastic sedimentology. Advisors: Drs. Charles Kerans and Stephen Hasiotis (University of Kansas); Dissertation: *Marine–Continental Transitions in a Greenhouse World:* Reconstructing Late Cretaceous Deltas of Paleopolar Arctic Alaska and Utah

# M.S., Geological Sciences, University of Alaska in Fairbanks

May 2010

Specialty: mudrock sedimentology and Arctic stratigraphy. Advisor: Dr. Michael Whalen; Thesis: *Geochemistry, Sedimentology, and Stratigraphy of the Lower Cretaceous Pebble Shale Unit, Northeastern Alaska* 

## B.S., Geological Sciences, California State University, Fullerton

August 2002

Advisor: Dr. Diane Clemens-Knott; Senior Thesis: *Stratigraphy of the Goldstein Peak Pendant, Western Sierra Nevada Batholith, California: Paleoenvironmental Reconstruction of a Mesozoic Arc Surface* 

## **Employment History**

## **Communications Coordinator**

July 2022 - Present

Gulf Coast Carbon Center (GCCC), Bureau of Economic Geology

Austin, TX

- Consortium-program coordinator, and science communicator of GCCC research programs, for a variety of sector audiences including nonprofit, corporate, state or federal agencies, and popular outlets.
- Help research staff articulate findings to a wide variety of stakeholders with different levels of science literacy
  and help research staff communicate more effectively with the wide variety of GCCC groups and individuals
  (e.g., consortium sponsors, industry representatives, and science collaborators).

# **Senior Geology Lecturer**

September 2017 – August 2022

Texas State University, Department of Geography

San Marcos, TX

- In-person and virtual course instructor for 38-semester-long geology courses (Physical Geology, Historical Geology, Sedimentation & Stratigraphy, & Petroleum Geology)
- Lab Instructor for upper division courses and lab coordinator for all geology lab courses; creator of course assignments, lab exercises, online modules, and supplemental lecture and lab materials
- Advisor for undergraduate geography majors, non-majors, and 80–190 geology minors/semester

# **Geology Writer and Editor**

May 2021 – March 2022

ACT-GEO Abreu Consulting and Training, L.LC.

Houston, TX

• Researcher, writer, reviewer, and editor of manuscripts, professional reports and presentations, teaching materials, geologic field guides and company literature for marketing

#### **Geology Consultant**

October 2020 – July 2021

ConocoPhillips Alaska (Provided Workshop & Consulted on Confidential Project)

Anchorage, AK

# Senior Geology Lecturer, Summer Contractor

June 2018 – August 2019

University of Texas at Austin, McCombs School of Business

Austin, TX

- Summer instructor for Sed Rocks for the Energy Management Program within the McCombs School of Business
- Designed sedimentology and petroleum geology summer courses for the American Association of Professional Landmen (AAPL) accredited undergraduate program for students across undergraduate disciplines
- Implemented hands-on exercises to break up 3.5-hour long lectures twice a week

**Geology Lecturer** 

July 2016 – September 2017

Texas State University, Department of Geography (including 130–190 geology minors/year)

San Marcos, TX

- Physical Geology, Historical Geology, Sedimentology & Stratigraphy Lecturer and Lab Instructor
- Implemented new lab assignments and oversaw graduate teaching assistants for Historical Geology lab sections
- Added additional rocks to lab curriculum, implemented department-owned core assignments, led geology field trips, created geology field assignments, etc.

#### **Graduate Research Assistant**

August 2009 – May 2016

Quantitative Clastics Laboratory (QCL) at the Bureau of Economic Geology

Austin, TX

- Measured sections and interpreted stratigraphic intervals from outcrops in Alaska, Utah, Colorado & Wyoming
- Created geology field trip guides and led portions of field trips for sponsors
- Presented sedimentology-focused research geared for industry at annual consortium meetings and conferences

## Geology Consultant, Intertek

April 2013 - May 2013

BP Alaska (Confidential Projects)

Anchorage, AK

## Geology Consultant, Quantitative Clastics Laboratory

June – July 2009

Bureau of Economic Geology

Austin, TX (project based out of Fairbanks, AK)

- Conducted first ground-based LiDAR survey in Arctic Alaska at Sagwon Bluffs along the Sagavanirktok River
- Continued 2008 research by measuring stratigraphic sections in the Prince Creek and Sagavanirktok formations

#### **Exploration Geologist and Geology Intern**

September 2007 – September 2008

FEX L.P. (subsidiary of Talisman Energy, Inc.)

Anchorage, AK

- Integrated wireline well logs, core, analytical data and seismic interpretations using GeoGraphix
- Examined Lower Cretaceous stratigraphy, source rock, and reservoir potential in northern Alaska
- Carried out helicopter-supported field investigations and co-led field trip for FEX and Talisman employees in Northern Alaska on the Upper Cretaceous Schrader Bluff, Prince Creek, and Sagavanirktok formations

### **Geology Intern for the Energy Division**

January 2006 - June 2009

Alaska Department of Natural Resources, Division of Geological & Geophysical Surveys

Fairbanks, AK

- Investigated the sedimentology and stratigraphy of the Kemik Sandstone (Kuparuk C), pebble shale unit (Kalubik Fm), Hue Shale, Schrader Bluff (West Sak), Prince Creek (Ugnu), and Sagavanirktok formations in northern Alaska
- Performed reservoir and source rock evaluations

### **Staff Geologist**

September 2002 – June 2005

URS Corporation and Earth Tech

Orange County, CA

- Conducted Phase I and Phase II investigations on contaminated sites in the L.A. Basin
- Drilled subsurface using air rotary, hollow- and solid-stem augers, core, caisson drills and direct push
- · Participated in fault trench studies, tieback integrity testing, shoring, and installed soldier piles

# **Geology Field Trips Lead for Industry**

2014 Co-Lead Quantitative Clastics Laboratory Consortium Field Trip for Members titled: Wave, Tide, and River-Dominated Systems of the Cretaceous Western Interior Seaway: The Kenilworth and Grassy Members of the Blackhawk, the Sego, and Loyd formations eastern Utah and northwestern Colorado.

2008 Co-Lead Helicopter-Supported Field Trip for FEX L.P. and Talisman Energy employees titled: Surface Geology and Reservoir Potential of the Schrader Bluff, Prince Creek, and Sagavanirktok formations: Sagavanirktok Quadrangle, North Slope, Alaska.

# **Professional Service**

- 2023 Reviewer for International Journal of Greenhouse Gas Control
- 2022-2021 Texas State University's Geology Club Advisor
- 2022-2019 Texas State University's Geology Minor Coordinator
- 2020 Reviewer for Sedimentology, the Journal of the International Association of Sedimentologists
- 2019 Society of Sedimentary Geology (SEPM) member of the Officer Nominating Committee, Reviewer for the Journal of the Geological Society of Sweden, titled Geologiska Föreningen (GFF)
- 2018 & 2019 Member of selection committee for highest award of SEPM, the William H. Twenhofel Award for "Outstanding Contributions to Sedimentary Geology"
- 2018 NSF Reviewer, Sedimentary Geology and Paleobiology Panel
- 2018–2020 Texas State University, Geography Dept., Undergraduate Curriculum Committee
- 2016 Session Chair on Unconventional Resources at the AAPG/SEG International Conference held in Barcelona
- 2015 Geology Instructor for GeoFORCE Texas 10<sup>th</sup> Grade Southwest Academy held in Nevada, Utah, and Arizona; Reviewer for Arctic USGS Publication
- 2014 AAPG/SEPM Banff Hedberg conference presenter regarding Arctic depositional systems
- 2012 Representing Geologist at the central Transantarctic Mountain Science Camp Workshop to select the next deep field camp in Antarctica for 2013+.
- 2011 Geology Aid for GeoFORCE Nevada, Utah, and Arizona
- 2010 Geology Counselor for GeoFORCE Nevada, Utah, and Arizona

# **Geology Fieldwork Campaigns**

Logistics Note: \*Fixed-wing aircraft supported †Helicopter supported ◊Boat supported

Book Cliffs, Utah and Rangely, Colorado (4 weeks) 2013 – 2014

\*ONational Petroleum Reserve-Alaska (11 weeks) 2010 - 2012

†Sagwon Bluffs, Sagavanirktok River, Alaska (2 weeks) 2009

†Toolik, Sagavanirktok, and Ivishak Rivers, Alaska (7 weeks) 2008

†Toolik River, Alaska (2 weeks) 2007

- \*<sup>†</sup>♦ National Petroleum Reserve–Alaska (9 weeks) 2006 2007
- \*†Arctic National Wildlife Refuge, Alaska (4 weeks) 2006

Sierra Nevada Foothills, California (4 weeks) 2000 – 2002

### **Invited Presentations and Workshops**

2020 ConocoPhillips (Anchorage, Alaska)

2020 Texas State University Geology Club (San Marcos, TX)

2015 BP Global Community of Practice Seminar for the Western Hemisphere, recorded for Eastern (Houston Office)

2013 University of Wisconsin, Milwaukee, Department of Geosciences Colloquium

2013 2-day Workshop on Arctic Alaska Late Cretaceous Stratigraphy (BP Anchorage)

2012 NSF, Association of Polar Early Career Scientists, North Slope Early Career Scientists, Webinar Series

## **Invited Geology Field Trips**

2015 Utah's Ferron Sandstone (Janok Bhattacharya, McMaster University)

2013 Svalbard Field Trip (Statoil)

2007 Alaska Division of Geology & Geophysical Survey North Slope Sponsor's Tour (Talisman Energy)

2006 Book Cliffs Field Trip, Utah (Quantitative Clastics Laboratory, The University of Texas at Austin)

2006 Grand Junction-Rangely-Steamboat Springs, Colorado Field Trip (Anadarko)

2001 Oahu and Big Island Hawai'i Field Trip (Rice University)

# **Teaching Experience**

Geology Senior Lecturer, Texas State University, San Marcos	2017 – Present
Senior Lecturer, Summer Contractor, University of Texas Austin, McCombs Business School	2018 - 2019
Geology Lecturer, Texas State University San Marcos	2016 - 2017
Geology Instructor, University of Texas Austin, GeoFORCE 10th Grade Academy	Summer 2015
Graduate Teaching Assistant (GTA), University of Texas at Austin, JSG Field Camp 660A	Summer 2010
GTA, University of Alaska Fairbanks, Sedimentology and Field & Computer Methods in Geology	Spring 2006
GTA, University of Alaska Fairbanks, Mineralogy	Fall 2005

# **List of Courses Taught**

Course Number & Title	Semester/year S	Students Enrolled
1. GEOL 3410 Sedimentation & Stratigraphy (+ teach lab)	Spring 2022	13
2. GEOL 1420 Historical Geology (+ oversee lab)	Spring 2022	57
3. GEOL 1410 Physical Geology (+ oversee lab)	Fall 2021	86
4. GEOL 1410 Physical Geology (+ oversee lab)	Fall 2021	85
5. GEOL 1420 Historical Geology (+ oversee lab)	Fall 2021	50
6. GEOL 4321 Directed Studies (Undergraduate Project)	Fall 2021	01
7. GEOL 1420 Historical Geology (+ oversee lab)	Spring 2021	55
8. GEOL 3410 Sedimentation & Stratigraphy (+ teach lab)	Spring 2021	11
9. GEOL 1420 Historical Geology (+ oversee lab)	Fall 2020 (1/4 time due to covid	ł-19) 53
10. GEOL 1420 Historical Geology (+ oversee lab)	Spring 2020	60
11. GEOL 3410 Sedimentation & Stratigraphy (+ taught lab)	Spring 2020	20
12. GEOL 4321 Petroleum Geology Lab	Fall 2019	06
13. GEOL 4330 Petroleum Geology	Fall 2019	06
14. GEOL 1420 Historical Geology (+ oversee lab)	Fall 2019	53
15. GEO 316P Sedimentary Rocks – For Non-Majors	Summer 2019	04
16. GEOL 3410 Sedimentation & Stratigraphy (+ taught lab)	Spring 2019	05
17. GEOL 1420 Historical Geology (+ oversee lab)	Spring 2019	60
18. GEOL 1410 Physical Geology	Spring 2019	60
19. GEOL 4321 Petroleum Geology Lab	Fall 2018	20
20. GEOL 4330 Petroleum Geology	Fall 2018	20
21. GEOL 1420 Historical Geology (+ oversee lab)	Fall 2018	60
22. GEO 316P Sedimentary Rocks – For Non-Majors	Summer 2018	12
23. GEOL 3410 Sedimentation & Stratigraphy (+ taught lab)	Spring 2018	04
24. GEOL 1420 Historical Geology (+ oversee lab)	Spring 2018	57
25. GEOL 1410 Physical Geology	Spring 2018	99
26. GEOL 4321 Directed Studies (Undergraduate Project)	Fall 2017	01
27. GEOL 4321 Petroleum Geology Lab	Fall 2017	09
28. GEOL 4330 Petroleum Geology	Fall 2017	09
29. GEOL 1420 Historical Geology (+ oversee lab)	Fall 2017	19
30. GEOL 1420 Historical Geology (+ oversee lab)	Fall 2017	38
31. GEOL 1410 Physical Geology (+ oversee lab)	Summer 2017	35
32. GEOL 3410 Sedimentation & Stratigraphy (+ taught lab)	Spring 2017	09
33. GEOL 1420 Historical Geology (+ oversee lab)	Spring 2017	58
34. GEOL 1410 Physical Geology	Spring 2017	98
35. GEOL 3410 Sedimentation & Stratigraphy (+ taught lab)	Fall 2016	04
36. GEOL 1420 Historical Geology (+ oversee lab)	Fall 2016	54
37. GEOL 1420 Historical Geology (+ oversee lab)	Summer 2016	23

# Awards, Extramural Funding, Research Grants, and Scholarships

#### Career

- 2024 Best Poster, 10th Annual Bureau of Economic Geology Research Symposium, UT Austin
- 2020 Teaching Award of Honor, Texas State Alumni, Texas State University
- 2019 Outstanding Leadership Award, Geology Club, Texas State University
- 2018 Favorite Professor Award, Alpha Chi Honor Society, Texas State University

#### PhD

- 2017 Pacific Section SEPM John C. Crowell Best PhD Dissertation Award (3rd Place, \$100)
- 2016 University of Texas at Austin Graduate School Dissertation Writing Fellowship (\$19,585)
- 2015 Geologic Society of America (GSA) Cordilleran Section Meeting, Alaska Travel Grant (\$770)
- 2013 Jackson School of Geosciences, UT Austin, Research Scholarship (\$2,000 to support Utah PhD fieldwork)
- 2012 BP Alaska (co-recipient of \$75,000 to support Alaska PhD fieldwork)
- 2012 GSA Alexander Sisson Research Award (\$2,500)
- 2011 BP Alaska (conducted high-resolution palynology and provided stratabug charts for PhD samples)
- 2011 American Association of Petroleum Geologists (AAPG), Kenneth H. Crandall Memorial Grant (\$3,000)
- 2010 BP Alaska (co-recipient of \$50,000 to support Alaska PhD fieldwork)
- 2010 ConocoPhillips Alaska (co-recipient of \$25,000 to support Alaska PhD fieldwork)

#### Masters

- 2010 AAPG, Award of Excellence, Top 10 International Poster Presentation in Calgary, Alberta, Canada
- 2010 Houston Geological Society, UT Austin Outstanding Student Award (\$500)
- 2007 GSA Sedimentary Geology Division Award, Outstanding Student Research Proposal (\$2,800)
- 2007 AAPG, John Kilkenny Memorial Grant (\$1,500)
- 2007 BP-Amoco Award (\$1,000)
- 2007 Geophysical Society of Alaska Scholarship (\$750)
- 2006 Alaska Geological Society Scholarship (\$1,500)

#### Undergraduate

- 2002 CSUF Department of Geological Sciences, Outstanding Major Award
- 2001 CSUF Department of Geological Sciences, Margaret Skillman Woyski Scholarship (\$300)
- 2001 CSUF College of Natural Sciences and Mathematics, Student Leadership Award (\$1000)
- 2000 California Federation of Mineralogical Societies Scholarship (\$2,000)
- 2000 CSUF Undergraduate Research and Creativity Award (co-recipient \$1,000)

### Media Coverage

November 20, 2012 "Digging up dirt in Northern Alaska: What happens when geologists take over the North Slope" by Doug Hissom, Baltimore Post Examiner, Alaska Dispatch News. <a href="http://baltimorepostexaminer.com/field-geologists-break-rocks-bones-while-searching-for-dinosaur-fossils-in-alaska/2012/10/16">http://baltimorepostexaminer.com/field-geologists-break-rocks-bones-while-searching-for-dinosaur-fossils-in-alaska/2012/10/16</a>

October 24, 2012 "Alaska: North Slope price of admission and survival requires attitude" by Doug Hissom, Baltimore Post Examiner, Alaska Dispatch News. <a href="http://www.adn.com/article/price-admission-and-survival-alaskas-north-slope-attitude">http://www.adn.com/article/price-admission-and-survival-alaskas-north-slope-attitude</a>

August 6, 2012 "Dino diggers: Searching for dinosaur fossils in Alaska" by Doug Hissom, Baltimore Post Examiner. <a href="http://baltimorepostexaminer.com/dino-diggers-searching-for-dinosaur-fossils-in-alaska/2012/08/06">http://baltimorepostexaminer.com/dino-diggers-searching-for-dinosaur-fossils-in-alaska/2012/08/06</a>

# Peer-Reviewed Manuscripts: In Preparation, Near Submission, or In Review

- 5. Flaig, P. P., Garcia, K. L., Denison, C., Demchuk, T. D., Spangenberg, J., Campion, N., Adatte, T., van der Kolk, D.A., Castelltort, S., and Moscardelli, L., (in review), Isotopic, biostratigraphic, and sedimentologic evidence for a new Paleocene–Eocene Thermal Maximum outcrop in Central Texas, USA, Geology
- 4. **van der Kolk, D.A.,** Flaig, P., and Hasiotis, S., (*in prep.*), Evolution of a high-latitude, river-dominated delta: The Upper Cretaceous Schrader Bluff Formation, Shivugak Bluffs, Arctic Alaska: Journal of Sedimentary Research.

- 3. van der Kolk, D.A., Whalen, M., Wartes, M., Garrard, R., and Bird, K., (*in prep.*), Regional source-rock evaluation of the Lower Cretaceous Pebble Shale Unit, Northern Alaska: American Association of Petroleum Geologists Bulletin.
- 2. **van der Kolk, D.A.,** Flaig, P., and Hasiotis, S., (*in prep.*), A comparative analysis of a storm-flood, river-dominated versus wave-dominated deltaic successions from Alaska's Arctic Ocean to the Western Interior Seaway: Sedimentology.
- 1. Druckenmiller, P., Johnson, K., Ramezani, J., Tsukui-Shockey, K., Flaig, P.P., McCarthy, P.J., van der Kolk, D.A., and Tomsich, S., (*in prep.*), U-Pb ID-TIMS dating of the dinosaur-bearing Prince Creek Formation (Upper Cretaceous, Campanian-Maastrichtian), Colville River, North Slope, Alaska.

### Publications [h-index = 5(07/2025)]

- 8. **van der Kolk, D.A.**, Mastrangelo, F.M., Hovorka, S.D., Tran, V.H., and Luciano, A.K., 2025, Carbon-nots to the Rescue! The University of Texas at Austin, Bureau of Economic Geology, CB2025, 12 p., <u>doi.org/10.23867/CB2025</u>
- 7. Ludvigson, G.A., Dieffendorff, A.F., Suarez, M.B., González, L.A., Corcoran, M.C., Schlanser, K., Flaig, P.F., McCarthy, P.J., van der Kolk, D.A., Houseknecht, D., Sanders, M., 2022, Stable Isotope Tracers of Cretaceous Arctic Paleoprecipitation: Geosciences Special Issue No. 43 Terrestrial Paleoclimatology and Paleohydrology of the Cretaceous Greenhouse World, v. 12, p. 1–18. https://doi.org/10.3390/geosciences12040143
- 6. Burnham, B. S., Bond, C., Flaig, P. P., **van der Kolk, D. A.**, Hodgetts, D., 2022, Outcrop conservation: Promoting accessibility, inclusivity, and reproducibility through digital preservation: The Sedimentary Record, vol. 20, no. 1, p. 5–14. <a href="https://doi.org/10.2110/sedred.2022.1.2">https://doi.org/10.2110/sedred.2022.1.2</a>
- 5. Suarez, C.A., Flaig, P.P., Ludvigson, G.A., Gonzalez, L.A., Tian, R., Zhou, H., McCarthy, P.J., **van der Kolk, D.A.**, and Fiorillo, A.R., 2016, Reconstructing the paleohydrology of a Cretaceous Alaskan paleopolar coastal plain from stable isotopes of bivalves: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 441, p. 339–351. <a href="http://dx.doi.org/10.1016/j.palaeo.2015.07.025">http://dx.doi.org/10.1016/j.palaeo.2015.07.025</a>
- 4. van der Kolk, D.A., Whalen, M.T., and Wartes, M.A., 2015, Source-rock Potential of the Lower Cretaceous Pebble Shale Unit, northeastern Alaska: Alaska Division of Geological & Geophysical Surveys Preliminary Interpretive Report 2015-1, 37 p. <a href="http://www.dggs.alaska.gov/pubs/id/29401">http://www.dggs.alaska.gov/pubs/id/29401</a>
- 3. Flaig, P.P., and **van der Kolk, D.A.**, 2015, Depositional Environments of the Prince Creek Formation along the east side of the Toolik River, Sagavanirktok Quadrangle, North Slope, Alaska: Alaska Division of Geological & Geophysical Surveys Preliminary Interpretive Report 2015-4, 17 p., 1 sheet. <a href="http://www.dggs.alaska.gov/pubs/id/29407">http://www.dggs.alaska.gov/pubs/id/29407</a>
- 2. van der Kolk, D.A., Flaig, P.P., and Hasiotis, S.T., 2015, Paleoenvironmental Reconstruction of a Late Cretaceous, Muddy, River-Dominated Polar Deltaic System: Schrader Bluff-Prince Creek Formation Transition, Shivugak Bluffs, North Slope of Alaska, U.S.A.: Journal of Sedimentary Research, v. 8, p. 903–936. https://doi.org/10.2110/jsr.2015.58
- 1. Clemens-Knott, D., **van der Kolk, D.A.,** Sturmer, D.M., and Saleeby, J.B., 2013, The Goldstein Peak Fm, central CA: Record of a Nonmarine Intra-arc Basin within the Early Cretaceous Sierra Nevada arc: Geosphere, v. 9, p. 718–735. https://doi.org/10.1130/GES00886.1

### **Conference Presentations and Abstracts**

- 37. Druckenmiller, P.S., Johnson, K., Ramezani, J., Tsukui, K., McCarthy, P.J., Perry, Z., Flaig, P.P., van der Kolk, D.A., Brown, C., and Erikson, G.M., 2023, First U-PB CA-ID-TIMS age constraints on Polar Dinosaurs from the Prince Creek Formation, northern Alaska: Society of Vertebrate Paleontologist Annual Meeting, Cincinnati, Ohio.
- 36. Flaig, P.P., van der Kolk, D.A., Herriott, T., and Wartes, M., 2022, Incorporating Digital Image Techniques into Outcrop Investigations of Alaska's North Slope Stratigraphy: GSA Abstracts with Programs, Denver, CO, abstract 76-3.

- 35. Flaig, P.P., Hasiotis, S.T., **van der Kolk, D.A.,** Prather, T., and Jones, R., 2020 (accepted: Cancelled Covid-19), Integrated ichnologic and sedimentologic response to increasing tidal influence and decreasing fluvial-flood processes in select ancient delta deposits: Changing characteristics versus relative controls: SEPM International Sedimentary Geosciences Congress Meeting, Flagstaff, Arizona.
- 34. Hasiotis, S.T., Flaig, P.P., van der Kolk, D.A., and Fiorillo, A., 2020 (accepted: Cancelled Covid-19), Comparing ichnopedologic signatures of high-to-low-latitude continental deposits in the deep-time record: Examples from late-Paleozoic to Mesozoic: SEPM International Sedimentary Geosciences Congress Meeting, Flagstaff, Arizona.
- 33. Flaig, P.P., and van der Kolk, D.A., 2020 (accepted: Cancelled Covid-19), A composite unconformity in Upper Cretaceous strata on the North Slope of Alaska: Characteristics and implications: American Association of Petroleum Geologists Annual Convention and Exhibition, Houston, Texas.
- 32. **van der Kolk, D.A.,** Whalen, M.T., Wartes, M.A., Garrard, R., and Bird, K., 2019, Source-Rock Evaluation of the Lower Cretaceous Pebble Shale Unit, Northern Alaska: American Association of Petroleum Geologists: Annual Convention and Exhibition, San Antonio, TX.
- 31. Flaig, P.P., and van der Kolk, D.A., 2017, Autogenic vs. allogenic driven facies and architectural changes at the Schrader Bluff-Prince Creek transition, Shivugak-Uluksrak Bluffs, North Slope, Alaska: American Association of Petroleum Geologists Pacific Section Meeting, Anchorage, Alaska.
- 30. **van der Kolk, D.A.,** Flaig, P. P., and Hasiotis, S.T., 2017, Sedimentology, and Stratigraphy of the lower Schrader Bluff and Prince Creek Formations at Shivugak Bluffs, National Petroleum Reserve-Alaska, Oral Presentation, AAPG Pacific Section Meeting, Anchorage, Alaska.
- 29. van der Kolk, D.A., Flaig, P. P., and Hasiotis, S.T., 2017, Preliminary Ichnology, Sedimentology, and Stratigraphy of the Maastrichtian Prince Creek and Upper Schrader Bluff Formations at Ocean Point, National Petroleum Reserve, Alaska: Poster Presentation, AAPG Pacific Section Meeting, Anchorage, Alaska.
- 28. Flaig, P. P., van der Kolk, D.A., Hasiotis, S.T., and McCarthy, P.J., 2017, Controls on the Evolution of Late Cretaceous to Paleocene Coastal to Deltaic Systems of the Prince Creek and Schrader Bluff Formations, North Slope of Alaska, Poster Presentation, AAPG Annual Convention and Exhibition, Houston, TX.
- 27. Flaig, P. P., Hasiotis, S.T., van der Kolk, D.A., and Jackson, A.M., 2016, Integrating Sedimentology and Ichnology in the Beacon Supergroup, Central Transantarctic Mountains, Antarctica to Clarify Paleoenvironmental Interpretations and Refine Basin Analysis: AAPG Annual Convention, Calgary, Alberta, Canada.
- 26. van der Kolk, D.A., Flaig, P. P., and Hasiotis, S.T., 2016, Stratigraphic Architecture, Sedimentology, and Ichnology of Late Cretaceous Storm-Flood, River-Dominated Deltas vs. Storm-Dominated Deltas: AAPG Annual Convention and Exhibition, Calgary, Alberta, Canada.
- 25. Flaig, P. P., van der Kolk, D.A., Hasiotis, S.T., and Prather, T., 2016, Comparative Analysis of Ancient Mouth Bars and Subaqueous Terminal Distributary Channels in Three Deltas: The Permian Mackellar Formation of Antarctica, the Cretaceous Schrader Bluff Formation of Arctic Alaska, and the Cretaceous Loyd Formation of Colorado, AAPG International Convention and Exhibition, Barcelona, Spain.
- 24. **van der Kolk, D.A.,** Flaig, P. P., and Hasiotis, S.T., 2016, Stratigraphic Evolution of a Paleopolar Topset-Clinoform System Upper Cretaceous Schrader Bluff-Prince Creek Formations, Arctic Alaska, USA: AAPG International Convention, Barcelona, Spain.
- 23. **van der Kolk, D.A.,** Flaig, P. P., and Hasiotis, S.T., 2015, The Schrader Bluff-Prince Creek Formation Transition at Shivugak Bluffs: A Paleoenvironmental Reconstruction of a Muddy, Polar Deltaic System from Late Cretaceous Arctic Alaska, GSA Cordilleran Section 111<sup>th</sup> Annual Meeting, Anchorage, Alaska.
- 22. van der Kolk, D.A., Flaig, P. P., and Hasiotis, S.T., 2015, Clastic Sedimentology, Stratal Architecture, and Preliminary Sequence Stratigraphic Framework of Upper Cretaceous Shelf, Shoreface, and Fluvio-Deltaic Deposits, Shivugak Bluffs, North Slope of AK, GSA Cordilleran Section, Anchorage, Alaska.
- 21. **van der Kolk, D.A.,** Flaig, P.P., and Hasiotis, 2014, In Pursuit of a High-latitude Signature During the Late Cretaceous Greenhouse: A Comparison Between Shallow Marine Storm Deposits in the Schrader Bluff

- Formation, Alaska and the Kenilworth and Grassy Members of the Blackhawk Formation, Utah, AAPG/SEPM Hedberg Conference, Banff, Alberta, Canada.
- 20. Flaig, P. P., McCarthy, P. J., Fiorillo, A. R., **van der Kolk, D.A.,** and Salazar, S.S., 2014, A High-Latitude Signature Evidenced by Distinctive, Recurring Facies and Sedimentary-Pedogenic Structures in the Late Cretaceous Prince Creek Formation, North Slope of Alaska, USA: AAPG/SEPM Hedberg Conference, Banff, Alberta, Canada.
- 19. Hasiotis, S.T., Gingras, M.K., Halfan, A.H., Jackson, A.M., Flaig, P.P., and van der Kolk, D.A., 2014, Latitudinal Controls and Caveats on the Distribution of Trace Fossils and their Resultant Textures in Continental and Marine Depositional Systems: AAPG/SEPM Hedberg Conference, Banff, Alberta, Canada.
- 18. van der Kolk, D.A., Flaig, P.P., Hasiotis, S.T., and Wood, L., 2013, Applying GigaPan Robotic Photo-Panorama technology to Enhance Facies and Architectural analyses of the Upper Cretaceous Schrader Bluff and Prince Creek Formations at Shivugak Bluffs, North Slope of Alaska, USA: AAPG Annual Convention and Exhibition, Pittsburg, PA, AAPG Search and Discovery Article #90163.
- 17. Flaig, P. P., van der Kolk, D. A., Burton, D., Garrard, D., and Wood, L. J., 2011, LiDAR-enhanced facies, architectural, and statistical analyses of a potential Paleocene reservoir: The Prince Creek Fm at Sagwon Bluffs, North Slope, Alaska: GSA Abstracts with Programs, Minneapolis, MN, v. 43, p. 408.
- 16. **van der Kolk, D.A.,** Flaig, P.P., Hasiotis, S.T., and Wood, L., 2011, High-latitude Shoreface to Coastal-plain Transitions: The Schrader Bluff and Prince Creek Formations at Shivugak Bluff, North Slope, Alaska: AAPG Pacific Section Meeting, Anchorage AK, p. 92.
- 15. van der Kolk, D.A., Whalen, M., Wartes, M., Newberry, R., and McCarthy, P., 2011, Geology and Source Rock Potential of the Lower Cretaceous Pebble Shale Unit, Northeastern Alaska: AAPG Pacific Section Meeting, Anchorage AK, p. 93.
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# **Undergraduate Research Experience**

Undergraduate Senior Thesis, California State University Fullerton	2000 - 2002
Lab Assistant, Geochemistry Lab, Rice University	Summer 2001
KECK Scholar, KECK Geology Consortium Mars Project, NASA Goddard Space Flight Center	Summer 2000
Summer Scholar, Center for High Pressure Research, SUNY Stony Brook	Summer 1999

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