# JOHN SAKULICH

#### Curriculum Vitae

Associate Professor Biology Department Regis University Denver, CO 303-458-4093 jsakulich@regis.edu

#### **EDUCATION**

**Doctorate, Geography**, The University of Tennessee, May 2011.

Dissertation Title: A Dendrochronological Approach for Analyzing the Geographic Range Structure of

Tree Species

Advisor: Dr. Henri Grissino-Mayer

Master of Science, Geography, The Pennsylvania State University, August 2004.

Thesis Title: Fire Regimes and Forest Dynamics of Mixed Conifer Forests in Guadalupe Mountains

National Park, Texas.

Advisor: Dr. Alan H. Taylor

**Bachelor of Science with distinction, Geography**, The Pennsylvania State University, May 2002.

#### **GRANTS AND AWARDS**

Advisor of the Year Award, Regis University, May 2021.

University Research and Scholarship Council, Regis University, Faculty Research Grant, Ecological effects of wildfire in Guadalupe Mountains National Park, 2017. \$3,397.

**Rocky Mountain Biological Laboratory Research Fellowship**, Dendroecological reconstruction of alpine treeline dynamics, 2013. \$1,500.

Regis College Faculty Development Committee, Summer Research Grant, Dendroecological reconstruction of alpine treeline dynamics, 2013. \$3,000.

**Outstanding Teaching Associate Award**, Department of Geography, The University of Tennessee, Knoxville, Tennessee, 2010.

**Robert G. Long Outstanding Graduate Student Award,** Department of Geography, The University of Tennessee, Knoxville, Tennessee 2009.

**National Science Foundation Doctoral Dissertation Research Improvement Grant,** Climate-induced range dynamics of eastern U.S. forests, 2009. \$11,871.

Association of American Geographers Dissertation Research Award, 2009. \$500

**Graduate Student Publication Award,** Department of Geography, The University of Tennessee, Knoxville, Tennessee 2009.

**National Science Foundation GK-12 Fellowship**, Department of Geography, The University of Tennessee, Knoxville, Tennessee, 2008–2009.

**Outstanding Teaching Assistant Award**, Department of Geography, The University of Tennessee, Knoxville, Tennessee, 2008.

**John and Elizabeth Holmes Teas Scholarship**, College of Earth and Mineral Sciences, The Pennsylvania State University, University Park, Pennsylvania, 2001–2002.

#### REFEREED PUBLICATIONS

## Sakulich, J.

2016. Reconstruction and spatial analysis of alpine treeline in the Elk Mountains, Colorado, USA, *Physical Geography*, 36 (6): 471–488.

Petrucelli, C.A., **Sakulich**, **J.**, Harley, G.L., and Grissino-Mayer, H.D. 2014. Structure and dynamics of an old-growth pine-oak community in the southern Appalachian Mountains, Georgia, U.S.A. *Southeastern Geographer*, 54(2):161–182.

Hart, J.L., van de Gevel, S.L., **Sakulich, J.**, and Grissino-Mayer, H.D. 2010. Influence of Climate and Disturbance on the Growth of *Tsuga canadensis* at its Southern Limit in Eastern North America. *Trees – Structure and Function*, 24: 621–633, doi: 10.1007/s00468-010-0432-y.

D'Arrigo, R., Jacoby, G., Buckley, B., **Sakulich**, **J.**, Frank, D., Wilson, R., Curtis, A., and Anchukaitis, K.

2009. Tree Growth and Inferred Temperature Variability at the North American Arctic Treeline. *Global and Planetary Change*, 65: 71–82, doi: 10.1016/j.gloplacha.2008.10.011

D'Arrigo, R., Allan, R., Wilson, R., Palmer, J., **Sakulich, J.**, Smerdon, J.E., Bijaksana, S., and Ngkoimani, L.O.

2008. Pacific and Indian Ocean climate signals in a tree-ring record of Java monsoon drought. *International Journal of Climatology*, 28: 1889–1901. doi: 10.1002/joc.1679.

### Sakulich, J., and Taylor, A.H.

2007. Fire regimes and forest structure in a sky island mixed conifer forest Guadalupe Mountains National Park, Texas, USA. *Forest Ecology and Management* 241 (3): 62–73.

D'Arrigo, R., Wilson, R., Palmer, J., Curtis, A., **Sakulich, J.**, Bijaksana, S., Zulaikah, S., and Ngkoimani, L.

2006. Monsoon drought over Java, Indonesia during the past two centuries. *Geophysical Research Letters*, 33 (4). L04709, doi:10.1029/2005GL025465.

D'Arrigo, R., Wilson, R., Palmer, J., Krusic, P., Curtis, A., **Sakulich, J.**, Bijaksana, S., Zulaikah, S., Ngkoimani, L., and Tudhope, A.

2006. Reconstructed Indonesian warm pool SSTs from tree rings and corals: Linkages to Asian monsoon drought and ENSO. *Paleoceanography*. 21 (3). PA3005, doi:10.1029/2005PA001256.

#### PRESENTATIONS AT PROFESSIONAL MEETINGS

## **Sakulich**, **J.** and Jiang, P.

Vegetation dynamics of Gunnison Sage-grouse habitat in southwest Colorado, Abstract accepted for the 116th annual meeting of the American Association of Geographers, April 2020, but conference cancelled because of pandemic.

# Sakulich, J., Poulos, H., and Taylor, A.

Effects of wildfire on stand structure and composition in Guadalupe Mountains National Park, Texas. Talk presented at the 115th annual meeting of the American Association of Geographers. April 3–7, 2019. Washington, DC.

# **Sakulich**, **J.** and Harley, G.H.

Spatial variability in climate response of Longleaf pine. Poster presented at the 114th annual meeting of the American Association of Geographers. April 10–14, 2018. New Orleans, Louisiana.

### Martin, L. and Sakulich, J.

Tree invasion of a subalpine fen in northern Colorado. Poster presented at the 112th annual meeting of the American Association of Geographers. March 29–April 2, 2016. San Francisco, California.

Bjelland, M.D., **Sakulich, J**., Trudeau, D., Abbott, J.A., Powell, R.L., Herrman, T., and Cunningham, M.

Campus carbon reduction: what are our strategies, obstacles, and solutions? Panel discussion at the 112th annual meeting of the American Association of Geographers. March 29–April 2, 2016. San Francisco, California.

### Sakulich, J. and Tanaka, K.

Spatial analysis and reconstruction of past tree distributions in the southern Rocky Mountains. Poster presented at the 111th annual meeting of the Association of American Geographers. April 21–25, 2015. Chicago, Illinois.

# Sakulich, J.

Seeing the forest through the trees: Using tree rings to reconstruct past environments. Talk presented at the Regis College Fall Faculty Conference. October 3, 2014.

# **Sakulich, J.** and Carlstrom, J.

Dendroecological reconstruction of treeline dynamics in the Elk Mountains, Colorado, U.S.A. Paper presented at the 110<sup>th</sup> annual meeting of the Association of American Geographers. April 8–12, 2014, Tampa, FL.

# Farrell, K., Carlstrom, J. Locke, C., and Sakulich, J.

Reconstruction of alpine treeline dynamics. Poster presented at the Regis University Celebration of Student Learning, December 3, 2013.

## Sakulich, J., Hart, J.L., van de Gevel, S.L., and Grissino-Mayer, H.D.

Spatial modeling of climate-growth relationships of eastern North American trees. Poster presented at the Annual meeting of the Ecological Society of America, Portland, Oregon, 8 August 2012.

## Sakulich, J.

Integrating ecology, geology, and human-environment relationships in the environmental sciences classroom. Poster presented at the Association for Environmental Studies and Sciences annual meeting and conference, Santa Clara, California, 23 June 2012.

Campisi, J., Franco, M., Betz, J., Ghedotti, M., Penheiter, K., **Sakulich, J**., Kleier, C. TBL in a biomedical sciences M.S. program: Student & faculty perceptions of learning and group work. Poster presented at the 11<sup>th</sup> annual meeting of the Team Based Learning Collaborative, St. Petersburg, Florida, 2 March, 2012.

# Sullivan, D.G., and Sakulich, J.

Dendrochronologic and Biologic Evidence for Little Ice Age Lake Levels from Western Colorado. Paper presented at the annual meeting of the Association of American Geographers. Seattle, Washington, 12 April 2011.

Sakulich, J., Hart, J.L., van de Gevel, S.L., Nagle, N.N., and Grissino-Mayer, H.D.

Modeling spatial variability of climate response in annual growth of eastern North

American trees. Paper presented at the annual meeting of the Association of American
Geographers. Seattle, Washington, 12 April 2011.

## **Sakulich, J.**, Hart, J.L., van de Gevel, S.L., and Grissino-Mayer, H.D.

Variability of Annual Growth and Climate Response across the Geographic Range of *Tsuga canadensis* (L.) Carr. Paper presented at the annual meeting of the Association of American Geographers. Washington, D.C., 15 April 2010.

# Nesbitt, J., Sakulich, J., et al.

From Pith to Bark: An Introduction to Collaborative Learning at the North American Dendroecological Fieldweek. Paper presented at the annual meeting of the Association of American Geographers. Las Vegas, Nevada, 24 March 2009.

# **Sakulich, J.,** Harden, C.P., and Grissino-Mayer, H.D.

Assessing Slope Stability Using Annual Growth Rings in Hardwood Trees, House Mountain, Knox County, Tennessee, U.S.A. Paper presented at the annual meeting of the Association of American Geographers. Boston, Massachusetts, 18 April 2008.

**Sakulich, J.**, D'Arrigo, R., Wilson, R., Palmer, J., Curtis, A., Bijaksana, S., Zulaikah, S., and Ngkoimani, L.

Tree-ring Chronologies from Remnant Teak (*Tectona grandis*) Stands and Subfossil Wood on Java, Indonesia. Paper presented at the 7<sup>th</sup> International Conference on Dendrochronology. Beijing, China, 11 June 2006.

**Sakulich, J.**, D'Arrigo, R., Wilson, R., Palmer, J., Curtis, A., Bijaksana, S., Zulaikah, S., and Ngkoimani, L.

Javan Teak Tree-ring Chronologies: Indices of the ENSO-Asian Monsoon System. Paper presented at the annual meeting of the Association of American Geographers. Chicago, Illinois, 10 March 2006.

# Sakulich, J., and Taylor, A.H.

Vegetation dynamics in response to fire regime and human land-use change in the southern Guadalupe Mountains. Paper presented at the annual meeting of the Association of American Geographers. Denver, Colorado, 9 April 2005.

### **Sakulich**, **J**, and Taylor, A.H.

Fire regimes and forest dynamics in mixed conifer forests of Guadalupe Mountains National Park: The influence of livestock grazing. Paper presented at the annual meeting of the Association of American Geographers. Philadelphia, Pennsylvania, 16 March 2004.

### **INVITED PRESENTATIONS**

Ecological effects of wildfire in Guadalupe Mountains National Park. Invited research talk presented at weekly seminar series, Department of Geography and Environmental Science, University of Colorado Denver. February 5, 2021.

Spatial analysis of alpine treeline in the Elk Mountains of Colorado. Invited research talk presented at weekly seminar series, Department of Integrative Biology, University of Colorado Denver. November 4, 2016.

Dendroecological reconstruction of alpine treeline dynamics in the Elk Mountains, Colorado. Talk presented at Regis University, Department of Biology Seminar Series. September 8, 2014.

Dendroecological reconstruction of treeline dynamics. Invited research talk presented at the Tuesday Night Research Seminar Series at Rocky Mountain Biological Laboratory, Gothic, Colorado. August 5, 2014.

An introduction to tree-ring research. Lecture presented to Tri-Beta Biology Honors Society, Regis University, September 2011.

Applications of dendrochronology in geographical research. Lecture presented to *Introduction to Geography* course, South College, Knoxville, Tennessee, 2010.

Reconstructing fire history and forest dynamics using tree rings. Lecture presented to *Dendrochronology* course, Department of Geography, The University of Tennessee, Knoxville, Tennessee, 2007.

Introduction to map projections. Lecture presented to *Cartographic Design* course, Department of Geography, The Pennsylvania State University, University Park, Pennsylvania, 2003.

Introduction to glacial processes. Lecture presented to *World Landforms* course, Department of Geography, The Pennsylvania State University, University Park, Pennsylvania, 2002.

Contemporary research in geography. Lecture presented to *Social Studies in the Elementary School Classroom* course, Department of Education, Lebanon Valley College, Annville, Pennsylvania, 2002.

## **TEACHING EXPERIENCE**

Associate Professor, Regis University, Department of Biology, August 2017–Present

Assistant Professor, Regis University, Department of Biology, August 2011–August 2017

**Graduate Teaching Associate**, The University of Tennessee, Department of Geography, August–December 2009.

**National Science Foundation GK–12 Fellow**, The University of Tennessee, Department of Geography, 2008–2009.

**Group Leader/Facilitator**, 18th Annual North American Dendroecological Fieldweek (NADEF), June 13–21, 2008.

**Teaching Assistant**, The University of Tennessee, Department of Geography, August 2007–May 2008.

**Teaching Assistant**, The Pennsylvania State University, Department of Geography, August 2002–May, 2003.

### **RESEARCH EXPERIENCE**

Associate Professor, Regis University, Department of Biology, August 2017–Present

Assistant Professor, Regis University, Department of Biology, August 2011-August 2017

**Research Assistant**, Initiative for Quaternary Paleoclimate Research, The University of Tennessee. Knoxville, Tennessee. August 2010–May 2011

**Senior Research Staff Assistant**, Tree-Ring Laboratory, Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York. 2005–2007.

**Research Staff Assistant**, Vegetation Dynamics Laboratory, The Pennsylvania State University, University Park, Pennsylvania. 2003–2004.

**Biological Science Technician**, United States Forest Service, Susanville, California, July–September, 2002.

**Field Research Assistant**, Vegetation Dynamics Laboratory, The Pennsylvania State University, University Park, Pennsylvania. June–August, 2001.

### **SERVICE**

Chair, Department of Biology, Regis University, Denver, Colorado, August 2020 – Present.

**Program Director,** Environmental Sciences Program, Regis University, Denver, Colorado, August 2014 – Present.

**Program Director,** Environmental Biology Master's Program, Regis University, Denver, Colorado, August 2012 – May 2016.

**Co-Chair, University Assessment Committee**, Regis University, Denver, Colorado, August 2020 – Present

**University Assessment Committee**, Regis University, Denver, Colorado, September 2015 – August 2020

**Regis College Assessment Committee**, Regis University, Denver, Colorado, August 2015 – Present

**HLC Criterion Team Four (assessment)**, Regis University, Denver, Colorado, September 2015 – November 2018

**Regis College integrative core theme coordinator (Global Environmental Awareness)**, Regis University, Denver, Colorado, Fall 2015 – Spring 2017

**Faculty e-portfolio working group**, Regis University, Denver, Colorado, August 2014 – May 2015

**Faculty Search Committee**, Communication Department, Regis University, Denver, Colorado, Fall 2014 – Spring 2015.

**Regis University sustainability committee**, Regis University, Denver, Colorado, August 2014 – Present

**Regis College Academic integrity committee,** Regis University, Denver, Colorado, August 2013 – May 2016

**Regis Community Garden Steering Committee**, Regis University, Denver, Colorado, August 2012 – 2014.

SPARC Committee, Regis University, Denver, Colorado, January–May 2012.

**Environmental Sciences Program Representative**, Regis University Campus Visit Day, April, 2012.

**Biology Scholarship Exam**, Regis University, Denver, Colorado. Wrote and proctored exam, Spring 2012.

**Faculty Search Committee**, Biology Department, Regis University, Denver, Colorado, Spring 2012.