



Faculty Employment Application

Human Resources
888 N. Euclid Ave. #114 * P.O. Box 210158
Tucson, Arizona * 85721-0158

(520) 621-3662 Telephone
(520) 621-8299 TDD (8-5 M-F)

Job Number: 44727	Job Title: Assistant or Associate Professor	Date: Feb 18 2010 6:37PM
-----------------------------	---	------------------------------------

Personal Information

Last Name: Biondi	First Name: Franco	Middle Name:	Email Address: fbiondi@unr.edu			
Address: 1105 Riverberry Drive	City: Reno	State: NV	Zip Code: 89509	International Postal Code:	Country: USA	
Home Phone: 775-784-6921	Cell / Other Phone:		Contact Number: 775-784-6921			

References

Name:	Institution/Organization	Address	Title:	Phone:	Email Address:
Dr. Julio Betancourt	U.S. Geological Survey	Office of Arid Land Studies 1955 E 6th St Tucson AZ 85719	Senior Scientist and Project Chief	520 670-6821	jlbetanc@usgs.gov
Dr. Kam-biu Liu	Louisiana State University	Department of Geography and Anthropology 227 Howe-Russell Geoscience Complex Baton Rouge, LA 70803-4105	James J. Parsons Distinguished Professor of Geography	225-578-6136	kliu1@lsu.edu
Dr. David LeBlanc	Ball State University	Dept of Biology Muncie, IN 47306	Professor	(765) 285-8832	dleblanc@bsu.edu

Other Information

Are you legally authorized to work in the U.S.? Yes
What is your current employment status with the University of Arizona? Not a University of Arizona employee
If you are a current employee enter your Employee Identification Number (EID) in the space to the right. If you never worked for the University, worked as a student, or terminated your employment prior to July of 2001 enter N/A. Note: Please do not enter hyphens in the EID field. Your 9-digit EID number (Ex: 120001234) may be found by logging into the Employee Link website. Your EID number is located in the "Current Employment" tab. You may also find your EID number on your pay stub. Note: Your Employee ID number is NOT your Social Security Number. N/A

Supplemental Questions

Where did you first learn about this position?

Other (Enter name below)

Enter the specific name of any referral source, or the code printed on the business card you received from The University of Arizona career fair booth:

ITRDB e-mail Forum

Have you ever been convicted of or plea bargained to a misdemeanor offense?

No

If yes, you must provide criminal conviction information and dates: (*You are responsible for knowing if traffic violations or other citations received were classified as a misdemeanor*).

Have you ever been convicted of or plea bargained to a felony offense?

No

If yes, you must provide criminal conviction information and dates: (*You are responsible for knowing if traffic violations or other citations received were classified as a felony*).

By indicating 'Yes' below, I affirm that my responses above are true, complete and accurate. I understand that if I accept a job offer, I will be asked to give my written consent for the University of Arizona to conduct a check of my criminal conviction history, motor vehicle record, educational credentials and work history.

I further understand that a 'yes' response will not automatically disqualify me from consideration. However, falsifying, misrepresenting, or omitting criminal conviction information on any application document will likely result in a withdrawal of any job offer and termination of any subsequent employment with the University.

Yes, I affirm that my responses above are true, accurate and complete to the best of my knowledge.

Can you perform the essential functions (job duties) of this position with or without accommodation?

Yes

What is your current employment status with The University of Arizona?

Not a University of Arizona employee

If you have never worked for the University or terminated your employment prior to July 2001, please enter N/A in the space to the right. If you are a current, former, or retired UA employee and were issued an EmplID please enter your number in the space to the right. Your EmplID can be found by logging in to UAccess Employee and viewing your paycheck. Please do not enter hyphens in the EmplID field. Note: Your EmplID is not your Social Security Number.

N/A

Agreement

I certify the statements made by me in this application are true and complete to the best of my knowledge and belief and are made in good faith. I understand that any false statement made herein will void this application and any actions based upon it, and I agree to revise this application should any of the information change. I understand that this application and all attachments are the property of The University of Arizona. I authorize The University of Arizona or any of its agents to make reference checks relating to my employment and I also authorize all prior employers to provide full details concerning my past employment. I authorize the University of Arizona to request and obtain records to determine the accuracy of my responses. I understand that employment in certain positions may be conditional upon a background verification including but not limited to criminal records. I certify that I am or will be legally authorized to work in the United States at the time of hire.

BY SIGNING BELOW, I certify that I have read and agree with these statements.

Franco Biondi

Applicant's Name

Applicant's Signature

Date

[Close Window](#)

Office: Home:

*DendroLab, Dept. of Geography / MS 154 1105 Riverberry Dr.
University of Nevada Reno, NV 89509-7122
Reno, NV 89557-0048
Ph.: (775) 784-6921 E-mail: franco.biondi@gmail.com
Fax: (775) 682-8416 <http://dendrolab.org>*

February 18, 2010

Dr. Connie Woodhouse
Chair of the Search Committee
Faculty Position in Forests in the Earth System
University of Arizona
Tucson, AZ 85721

Subject: Application for Faculty Position in the Laboratory of Tree-Ring Research

Dear Dr. Woodhouse:

I wish to be considered for the Faculty Position in Forests in the Earth System that is available in the new School of Earth and Environmental Sciences.

I am a dendrochronologist with experience and interests in climate and forest dynamics, spatial processes, and environmental change. My long-term scientific goal is to understand how ecoclimatic

factors control landscape patterns and processes in present, past, and possibly future environments.

My most recent studies deal with the interaction of climate, wildfire, and land use changes, as seen

through the signs they leave in the growth and distribution of woody species over mountain ecosystems in the Great Basin of North America, in the Mexican transverse volcanic belt, and in the

Italian Apennines. Emphasis is placed on responses to regional climatic modes, such as the North American monsoon, and on the application of research results to watershed and natural resource management, particularly in terms of drought planning, fire use, and old growth conservation.

My publication record speaks for my strong writing, analytical, and statistical skills, as well as for

my commitment to continued professional development. I have a successful history of obtaining grants from the National Science Foundation and other Federal or non-Federal sponsors. For instance, I received the Faculty Early Career Development (CAREER) award from the Paleoclimate

Program of the National Science Foundation. This premier program sponsored my "Learning in the

Woods" project, which used a multi-faceted approach to integrate research and education on environmental change in the Great Basin, where rapid population growth is testing the vulnerability

of natural and human-dominated ecosystems to climatic fluctuations. Since my arrival at the University of Nevada, Reno, I have been P.I. or co-P.I. of competitive extramural grants worth a total of \$3.5 million. I am currently the statewide lead for the Ecological Change component of an

NSF-EPSCoR project entitled "Nevada Infrastructure for Climate Change Science, Education and

Outreach", which has been funded for a total of \$15 million over five years (2008-2013). The

Nevada System of Higher Education is also providing financial support to the project (\$6.6 million

F. Biondi's Application – Page 2

over the five years) from non-federal sources. This award is focused around five main components:

Climate Modeling, Ecological Change, Water Resources, Cyber-infrastructure, Education, and Policy, Decision-Making, and Outreach. As part of the research infrastructure funded by the project,

we are installing valley-to-peak transects designed to measure changes in atmospheric, hydrologic,

and ecologic variables, including the processes that control, and are recorded by, wood growth of lower and upper treeline species.

I am applying for the faculty position you have available because it aligns exactly with my research

experience and interests, while at the same time providing the opportunity to be part of a dynamic

institution, and to influence the future of a new program initiative and school. As shown in this letter, and in the other materials attached to my application, I have an enthusiasm for excellence in

my profession, either as a researcher, a teacher, or an administrator. Given my diverse background,

personal history, and cultural heritage, I highly value interdisciplinary collaboration and extramural

recognition. Today's environmental scientists face complex issues related to human impacts on Earth systems, which provide compelling reasons for disciplinary, interdisciplinary, and transformative approaches to research and learning.

I look forward to hearing from you with regard to my application. Thank you for your time and consideration.

Sincerely,

Franco Biondi, PhD

Enclosed Materials:

- Statement of research interests (as part of this application letter)
- Statement of teaching interests (as part of this application letter)
- Curriculum Vitae, including a list of publications (this file was uploaded separately to the application web site)
- Names and contact information for three referees (inserted directly in a page of the application web site)

F. Biondi's Application – Page 3

Statement of Research Interests

My background and research interests are at the intersection between ecology, climatology, and biogeography, with an emphasis on tree-ring science. For my dissertation project at the University of

Arizona, I modeled decadal-scale dynamics of an old-growth ponderosa pine stand (the Gus Pearson

Natural Area, in the Fort Valley Experimental Forest) after the start of fire suppression programs. In

particular, emphasis was placed on spatiotemporal analysis of tree and stand growth, using both

forest inventories and ring-width series. As a researcher at Scripps Institution of Oceanography, I provided information on the ecology of Torrey pine, on tree growth response to magmatic degassing in central California, on the history of July temperature in the Interior Northwest during the current millennium, and on the relationship between decadal shifts in Pacific climate and tree growth in Southern and Baja California. In addition, by combining proxy records from oceanic sediments and from terrestrial tree rings, I suggested that sudden inter-decadal change occurred near 1600 over marine and land systems of the American West Coast.

Since arriving at UNR in 2000, I have actively explored several new areas of research, which spawned from the NSF CAREER award I received. First, I have cooperated with mathematical statisticians on the application of stochastic models to long records of climate, such as those generated by proxy natural archives. These stochastic models can then be used to compute the likelihood of events not yet observed, such as a drought longer than all observed droughts. Second, I have developed an interest on using watershed-level simulation models together with tree-ring records of climate, wildfire, and woody species structure, to understand how the interaction of surface processes (such as vegetation cover, fire regime, streamflow, etc.) can best be represented in mountain environments. Third, I am involved in a pilot project aimed at dendrochronologically dating submerged trees in Sierra Nevada lakes, both to develop millennia-long chronologies (as it has already been done in Europe), and to conclusively determine if such trees reveal past megadroughts.

One active area of climate change research is the interaction between large-scale modes of variability at multi-annual scales, such as ENSO, with recurring seasonal climatic features, such as the North American Monsoon. Understanding the connection between oceanic, atmospheric, and terrestrial processes at those “human” timescales requires the inclusion of long, yet annually resolved, records of climate both in the ocean and on land. Continental paleoarchives with annual to seasonal resolution, such as tree rings, have therefore much to offer on those issues. They also provide a tool for defining the historical range of ecological variability in mountain landscapes, where human impacts are becoming increasingly significant, and where most freshwater resources originate.

With respect to the climate history and sensitivity of mountain and treeline environments, my research in the tropics of North America has helped breaking new ground. For instance, I applied radiocarbon techniques to scout for reliable dendroclimatic records, and developed the first long (>300 years) tree-ring chronology between 20°N and the Equator. Because of their sensitivity to rapid climate changes, timberline environments have been identified as excellent sites for detecting local and regional impacts of global warming. With that purpose in mind, I have employed intensive

monitoring of hydroclimatic variables (using automated weather stations) and tree stem size (using automated dendrometers) to achieve a better calibration between climate and xylem growth. I am planning to implement a similar approach as part of the current NSF-EPSCoR project mentioned above in my letter to obtain a clear definition of processes that control wood formation in lower (especially single-leaf pinyon) and upper (especially Great Basin bristlecone pine) treeline species.

Additional Evidence of Research Effectiveness:

- One of my research papers has been cited more than 160 times in ISI-listed scientific journals.
- I received the 2001 Paper of the Year Award from the Climate Specialty Group of the Association of American Geographers, and in 2006 I was a member of the National Academy of Science Committee that authored the book "Surface Temperature Reconstructions for the Last 2,000 Years".
- In 2008 I was the recipient of two research awards at the University of Nevada, Reno: the Hyung K. Shin Award for Excellence in Research from the College of Science, and the Outstanding Researcher Award from the Mackay School of Earth Sciences and Engineering. In the same year I also received the title of Senior Ecologist by the Ecological Society of America Board of Certification.
- All of my peer-reviewed publications (currently more than 50) are available on-line from the following web site address: <http://wolfweb.unr.edu/homepage/fbiondi/pubs.html>.

F. Biondi's Application – Page 5

Statement of Teaching Interests

As a teacher, I believe that students learn best when their classroom experience is stimulating and challenging. I am convinced that passion and enthusiasm, as well as scientific rigor, are required to communicate the subject matter effectively. At the same time, I consider equally important to foster student-based activities by means of field trips, class exercises, and research projects. I have two major goals in my teaching: (1) to develop students' critical thinking skills, and (2) to promote the interdisciplinary study of climate-ecosystem interactions in present, past, and possibly future environments. Especially in large introductory classes, students can benefit from a combination of lectures on broad concepts and background material, in-depth group discussion of research articles, and hands-on activities that challenge their ability to make observations, formulate testable hypotheses, and devise scientific experiments. In my upper level undergraduate and graduate classes, I commonly ask students to carry out a research project. This exposes them to an unsolved question and to the challenge of finding the best possible answer using their own creative thinking. In the meantime, the project gives students an opportunity to discover their research interests and develop their career. Field trips are included in almost every course I teach. I pursue my teaching goals by drawing on the teaching practice accumulated in various settings

(University of Nevada, San Diego State University, Southwestern College, the University of Arizona, and Catholic University of Milan), and on my vision of college education in the new millennium. For instance, based on current and expected trends, teaching now requires mastery not only of established knowledge, but also of computer-aided learning and teaching techniques. As science education enters this new era, I am looking for innovative ways of using web-based and audiovisual facilities to supplement course curricula. I have therefore taken full advantage of the “smart-classrooms” where I teach. I commonly employ a mixture of PowerPoint presentations, hand drawings, internet access, short videos, and animations to convey information to students. My areas of teaching expertise include climatology, paleoscience, field and quantitative methods. At UNR I have developed, proposed, and established several new classes on climate and environmental change. My current teaching responsibilities include introductory undergraduate (60-100 students), upper-division (10-30 students), and graduate level (5-15 students) courses. I am fortunate that my teaching responsibilities are closely tied to my research activities. In fact, my active research program easily leads to, and benefits from, the participation of both undergraduate and graduate students. Because my research projects are interdisciplinary, I cooperate with scientists who specialize in fields different from mine. Such interactions help and enrich my ability to communicate with students from multiple programs of study, as non-majors often attend my classes.

CURRICULUM VITAE¹

Franco Biondi

Geography Associate Professor and DendroLab Director

Faculty Member, Interdisciplinary Graduate Program of Environmental Sciences

Faculty Member, Graduate Program of Hydrologic Sciences

Faculty Member, Graduate Program of Atmospheric Sciences

Faculty Member, PhD Program in Ecology, Evolution and Conservation Biology

Department of Geography Ph.: + 1 (775) 784-6921 (office), -6348 (laboratory)

Mail Stop 154 Fax: + 1 (775) 682-8416

University of Nevada (UNR) E-mail: fbiondi@unr.edu

Reno, NV 89557-0048 <http://wolfweb.unr.edu/homepage/fbiondi/>

Major Interests: Climate and vegetation dynamics, spatial analysis, landscape processes, and environmental change.

1. UNIVERSITY EDUCATION

Doctor of Philosophy, Aug 1989 - Aug 1994. Major: Watershed Management, Minor: Geosciences;

School of Renewable Natural Resources, University of Arizona, Tucson. GPA: 4.0.

Dissertation: *Spatial and temporal reconstruction of twentieth-century growth trends in a naturally-seeded pine forest*. Advisor: Malcolm K. Hughes.

Master of Science, Aug 1985 - Dec 1987. Major: Watershed Management; School of Renewable

Natural Resources, University of Arizona, Tucson. GPA: 4.0. Thesis: *Influence of Gambel oak on radial growth of southwestern ponderosa pine: a dendrochronological study*.

Advisor: James O. Klemmedson.

Laurea magna cum laude (Italian Doctorate), Nov 1980 - Jul 1985. Major: Forestry; School of Agriculture and Forestry, University of Florence, Italy. Thesis: *Analisi dendrocronologica di antichi manufatti lignei toscani* [Dendrochronological analysis of ancient wooden artifacts from Tuscany; in Italian]. Advisor: Luca Uzielli.

2. PROFESSIONAL EXPERIENCE

2.1. Academic Positions

External Faculty Member, Aug 2007 - present. PhD Program in "Scienze e Tecnologie per la Gestione Forestale e Ambientale", University of Tuscia, Viterbo, Italy.

Guest Professor, Jul-Aug 2007. Chair of Forest Ecology, Swiss Federal Institute of Technology

¹ Whenever possible, a dotted line was used to indicate the time of my last promotion.

(ETH), Zurich, Switzerland.

Visiting Associate Professor, Mar-Jun 2007. Department of Geological and Environmental Sciences, School of Earth Sciences, Stanford University, California, USA.

Associate Professor with Tenure, Jul 2005 - present. Department of Geography, UNR.

Assistant Professor, Jul 2000 - Jun 2005. Department of Geography, UNR.

Adjunct Professor and Lecturer, Jun 1999 - Jul 2000. Global Change Research Group, Biology Department, San Diego State University, San Diego.

Assistant Project Scientist, Aug 1998 - Jul 2000. Geosciences Research Division, Scripps

Institution of Oceanography, University of California-San Diego, La Jolla, California.

2.2. Other Research Positions

Postgraduate Researcher (full time), Aug 1994 - Jul 1998. Geosciences Research Division, Scripps

Institution of Oceanography, University of California-San Diego, La Jolla, California.

Project: Establishment of a dendroclimatological research program. Supervisor: Wolfgang H. Berger.

Graduate Associate in Research (50% time), Aug 1989 - Jun 1991 / Jun 1992 - Jun 1994.

Laboratory of Tree-Ring Research, University of Arizona, Tucson. Projects:

Dendrochronological studies of forest species in the Sierra Nevada (including giant sequoia), and in Southern California. Supervisors: Malcolm K. Hughes, Lisa J. Graumlich and David M. Meko.

Dendrochronologist and Environmental Consultant (part time)

Sep 1988 - Dec 1990 for ENEL-CRTN, Milan, Italy. Projects: Analysis of data on biological monitoring of ozone pollution in northern Italy. Dendroclimatological analysis of various tree species in northern Italy. Supervisor: Giorgio Schenone.

Jun 1988 - Jul 1989 for Abruzzo National Park, Pescasseroli, Italy. Project:

Dendrochronological analysis of various tree species in the Italian Peninsula. Supervisor: Franco Tassi.

Research Technician II (part time), Jan - Mar 1988. Laboratory of Tree-Ring Research, University

of Arizona, Tucson. Project: Tree-ring analysis of conifer species from archaeological sites in Colorado. Supervisor: Thomas W. Swetnam.

Graduate Assistant in Research (25% time), Jul 1986 - Dec 1987. School of Renewable Natural Resources, University of Arizona, Tucson. Project: Tree-ring analysis of ponderosa pine growth in relation to presence of Gambel oak (M.S. Thesis Project). Supervisor: James O. Klemmedson.

2.3. Other Teaching Positions

Lecturer (part time), Jan - Jun 1997. Math/Science/Engineering Division, Southwestern College, San Diego County, CA. Supervisor: Roy Olson.

Graduate Teaching Associate (50% time), Aug 1991 - May 1992. Department of French and Italian,

University of Arizona, Tucson. Supervisor: Brunella Bigi.

Lecturer (part time), Feb 1989 - Aug 1990. School of Agriculture, Catholic University of Milan,

F. Biondi - CURRICULUM

- 3 -

Italy. Supervisor: Giuseppe Lorenzoni.

2.4. Languages

English (fluent; excellent colloquial and formal, spoken and written communication skills), Italian

(mother tongue), Spanish (read and comprehend), French (read only), Latin (read only).

2.5. Computer Skills

Programming Languages: SAS (excellent), GMT (excellent), R/S/Plus (very good), HTML (very

good), MATLAB (good), Java (fair), FORTRAN (fair), C and C++ (fair).

Twenty-five year experience in using software and hardware for either Windows (SAS, R, Matlab,

GMT, ArcGIS, GS+, Microsoft Office, Adobe Illustrator, Photoshop, Acrobat) or UNIX (Matlab, GMT, SSA Toolkit, XVGR, VI).

2.6. Special Courses, Training, and Workshops

Sep 16, 2008: "Using Degree Audit Reports in Advising (DARS)", UNR.

Dec 12, 2007: "Introduction to Cayuse Proposal Development System", Office of Sponsored Projects, UNR.

Jan 5, 2007: "Paymentnet Training", UNR.

Nov 28, 2006: "Digital Measures Training Class", UNR.

Nov 15, 2006: "SciQuest - ePurchasing Training Class", UNR.

Jun 19-25, 2005: "Workshop on Interdisciplinary Computational Science Education", National Computational Science Institute (NCSI), UNR.

Dec 12-18, 2004: "3rd International Winter School on Wood Anatomy of Tree Rings", Davos Laret, Switzerland.

Aug 18, 2004: "The Nolij Electronic System of Graduate Admission Evaluation", Graduate School, UNR.

Aug 14-15, 2004: "Workshop on Tahoe-Baikal Scientific Cooperation", Incline Village, Nevada.

Aug 21, 2003: "WebCT 4.0 Update", Online Teaching and Learning, UNR.

Feb 26, 2003: "Miss(ed) Manners: Maintaining an Effective Teaching and Learning Environment",

Excellence in Teaching Program, UNR.

Feb 18, 2003: "Helping Distressed and Distressing Students: An Informative Panel Presentation for

Teaching Faculty", Excellence in Teaching Program, UNR.

Feb 7, 2003: "Best Practices in Graduate Education", Graduate School, UNR.

Oct 4, 2002: "Graduate Admission Workshop", Graduate School, UNR.

Jan 31 - Feb 1, 2002: "Write More, Worry Less", Excellence in Teaching Program, UNR.

Feb 9 and Mar 9, 2001: "Creating Effective Assignments and Assessments", Excellence in Teaching

Program, UNR.

Jan 18, 2001: "Case Study Teaching in Science", Excellence in Teaching Program, UNR.

Jan 18, 2001: "Search Committee Chair Workshop", Affirmative Action Office, UNR.

F. Biondi - CURRICULUM

- 4 -

Jan 10, 2001: "Designing an Effective Syllabus", Excellence in Teaching Program, UNR.

Jan 10, 2001: "Web Course Tools (WebCT 3.0) Mini-Modules", Instructional Technologies Group, UNR.

Oct 4 and 25, 2000: "Developing a Teaching Portfolio", Excellence in Teaching Program, UNR.

Aug 24, 2000: "Making the First Day Successful", Excellence in Teaching Program, UNR.

Jul 20 - Aug 1, 1997: "A Systems Approach to El Nino Southern Oscillation", Summer Colloquium,

National Center for Atmospheric Research, Boulder, Colorado.

Sep 1 - Dec 1, 1993: "Research Problems in Forest Biometry", Department of Forest Resources, University of Minnesota, St. Paul.

Jun 1 - 27, 1992: "First Colloquium on Operational Environmental Prediction", NOAA Science

Center, Camp Springs, Maryland.

Mar 30 - Apr 7, 1992: “Using and Understanding GRASS v.4.0 for GIS Applications”,
Mathematics

Department, University of Arizona.

Sep - Oct, 1984: “Introduction to Programming” and “FORTRAN Language”, Centro di Calcolo
Elettronico, University of Florence, Italy.

2.7. Other Professional Activities

Fifteen-year experience in training and supervising laboratory technicians, college students, and
volunteers in both field and laboratory techniques.

Ten-year experience in developing courseware materials (notes, flowcharts, multimedia
presentations, computer-based training modules) for college education.

Twenty-year experience in carrying out and supervising field work, both in Europe and in North
America.

F. Biondi - CURRICULUM

- 5 -

3. PUBLICATION LIST₂

3.1. Peer-Reviewed Publications

3.1.1. Journal Articles

(submitted) *Biondi, F.*, and P. Hartsough. Tropical treeline stem growth at Nevado de Colima,
Mexico, related to hydroclimatic features of the North American Monsoon System
(NAMS).

(submitted) Solander, K., L. Saito, and *F. Biondi*. Streamflow simulation using a water balance
model for annually-resolved reconstructions.

(in review) Hartsough, P., G. Schleser, S.R. Poulson, and *F. Biondi*. Stable isotope
characterization of weekly tree growth at a tropical treeline site.

(in review) Kleppe, J.A., D.S. Brothers, G. Kent, *F. Biondi*, S.E. Jensen, and N. Driscoll.
Evidence for multicentennial medieval drought in the high Sierra of central
California, USA.

(in review) Snyder, K.A., R. Monnar, S.R. Poulson, P. Hartsough, and *F. Biondi*. Diurnal
variations of needle water isotopic ratios in two pine species.

(accepted) Di Filippo, A., A. Alessandrini, *F. Biondi*, S. Blasi, L. Portoghesi, and G. Piovesan.
Climate change and oak growth decline: Dendroecology and stand productivity of a
Turkey oak (*Quercus cerris* L.) old stored coppice in Central Italy. **Annals of Forest
Science**.

2009 *Biondi, F.*, P. Hartsough, and I. Galindo Estrada. Recent warming at the tropical
treeline of North America. **Frontiers in Ecology and the Environment** 7(9): 463–
464.

2009 Dilts, T.E., J.S. Sibold, and *F. Biondi*. A weights-of-evidence model for mapping the
probability of fire occurrence in Lincoln County, Nevada. **Annals of the Association
of American Geographers** 99(4): 1-16 3.

2009 Piovesan, G., E. Presutti Saba, *F. Biondi*, A. Alessandrini, A. Di Filippo, and B.
Schirone. Population ecology of yew (*Taxus baccata* L.) in the Central Apennines:
Spatial patterns and their relevance for conservation strategies. **Plant Ecology**
205(1): 23–46 3.

2008a *Biondi, F.*, and F. Qeadan. A theory-driven approach to tree-ring standardization:
Defining the biological trend from expected basal area increment. **Tree-Ring**

Research 64(2): 81–96. ³

² Manuscripts in preparation or in progress were not included.

F. Biondi - CURRICULUM

- 6 -

2008b *Biondi, F.*, and F. Qeadan. Inequality in paleorecords. **Ecology** 89(4): 1056–1067. ³

2008 *Biondi, F.*, T.J. Kozubowski, A.K. Panorska, and L. Saito. A new stochastic model of episode peak and duration for eco-hydro-climatic applications. **Ecological**

Modelling 211: 383–395. ³

2008 Kirchner, P., *F. Biondi*, R. Edwards, and J. McConnell. Variability of trace metal concentrations in Jeffrey pine (*Pinus jeffreyi*) tree rings from the Tahoe Basin, California, USA. **Journal of Forest Research** 13: 347–356. ³

2008 Piovesan, G., *F. Biondi*, A. Di Filippo, A. Alessandrini, and M. Maugeri. Droughtdriven growth reduction in old beech (*Fagus sylvatica* L.) forests of the central Apennines, Italy. **Global Change Biology** 14(6): 1265–1281. ³

2008 Saito, L., *F. Biondi*, J.D. Salas, A.K. Panorska, and T.J. Kozubowski. A watershed modeling approach to streamflow reconstruction from tree-ring records.

Environmental Research Letters 3: 024006 (6pp); doi:10.1088/1748-9326/3/2/024006. ³

2008 Hartsough, P.C., S.R. Poulson, *F. Biondi*, and I. Galindo Estrada. Stable isotope characterization of the ecohydrological cycle at a tropical treeline site. **Arctic,**

Antarctic, and Alpine Research 40(2): 343–354. ³

2007 *Biondi, F.*, S.D.J. Strachan, S.A. Mensing, and G. Piovesan. Radiocarbon analysis confirms the annual nature of sagebrush growth rings. **Radiocarbon** 49(3): 1231–1240. ³

2007 Di Filippo, A., *F. Biondi*, K. Cufar, M. de Luis, M. Grabner, M. Maugeri, E. Presutti Saba, B. Schirone, and G. Piovesan. Bioclimatology of beech (*Fagus sylvatica* L.) on the Eastern Alps: spatial and altitudinal climatic signals identified through a tree-ring network. **Journal of Biogeography** 34(11): 1873–1892. ³

2006 Py, C., J. Bauer, P.J. Weisberg, and *F. Biondi*. Radial growth responses of singleleaf pinyon (*Pinus monophylla*) to wildfire. **Dendrochronologia** 24: 39–46. ³

2005 *Biondi, F.*, T.J. Kozubowski, and A.K. Panorska. A new model for quantifying climate episodes. **International Journal of Climatology** 25(9): 1253–1264. ³

2005 *Biondi, F.*, P.C. Hartsough, and I. Galindo Estrada. Daily weather and tree growth at the tropical treeline of North America. **Arctic, Antarctic, and Alpine Research** 37(1): 16–24. ³

2005 Piovesan, G., *F. Biondi*, M. Bernabei, A. Di Filippo, and B. Schirone. Spatial and

³ Reprint linked electronically as a PDF file from <http://wolfweb.unr.edu/homepage/fbiondi/pubs.html>

F. Biondi - CURRICULUM

- 7 -

altitudinal bioclimatic zones of the Italian peninsula identified from a beech (*Fagus sylvatica* L.) tree-ring network. **Acta Oecologica** 27: 197–210. ³

2005 Piovesan, G., A. Di Filippo, A. Alessandrini, *F. Biondi*, and B. Schirone. Structure, dynamics, and dendroecology of an old-growth *Fagus* forest in the Apennines.

Journal of Vegetation Science 16: 13–28. ³

2004 *Biondi, F.* and K. Waikul. DENDROCLIM2002: A C++ program for statistical calibration of climate signals in tree-ring chronologies. **Computers & Geosciences** 30(3): 303–311. ³

- 2003 *Biondi, F.*, I. Galindo Estrada, J.C. Gavilanes R., and A. Elizalde Torres. Tree growth response to the 1913 eruption of Volcán de Fuego de Colima, Mexico. **Quaternary Research** 59(3): 293-299. 3
- 2002 *Biondi, F.*, T.J. Kozubowski, and A.K. Panorska. Stochastic modeling of regime shifts. **Climate Research** 23: 23-30. 3
- 2001 *Biondi, F.* A 400-year tree-ring chronology from the tropical treeline of North America. **Ambio** 30: 162-166. 3
- 2001 *Biondi, F.*, A. Gershunov, and D.R. Cayan. North Pacific decadal climate variability since AD 1661. **Journal of Climate (Letters)** 14: 5-10. 3
- 2000 *Biondi, F.* Are climate-tree growth relationships changing in north-central Idaho? **Arctic, Antarctic, and Alpine Research** 32: 111-116. 3
- 1999 *Biondi, F.* Comparing tree-ring chronologies and repeated timber inventories as forest monitoring tools. **Ecological Applications** 9: 216-227. 3
- 1999a *Biondi, F.*, and J.E. Fessenden. Response of lodgepole pine growth to CO₂ degassing at Mammoth Mountain, California. **Ecology** 80: 2420-2426. 3
- 1999b *Biondi, F.*, and J.E. Fessenden. Radiocarbon analysis of *Pinus lagunae* tree rings: implications for tropical dendrochronology. **Radiocarbon** 41: 241-249. 3
- 1999 *Biondi, F.*, D.L. Perkins, D.R. Cayan, and M.K. Hughes. July temperature during the second millennium reconstructed from Idaho tree rings. **Geophysical Research Letters** 26: 1445-1448. 3
- 1997 *Biondi, F.* Evolutionary and moving response functions in dendroclimatology. **Dendrochronologia** 15: 139-150. 3
- 1997 *Biondi, F.*, D.R. Cayan, and W.H. Berger. Dendroclimatology of Torrey pine (*Pinus F. Biondi - CURRICULUM*
- 8 -
torreyana Parry ex Carr.). **The American Midland Naturalist** 138: 237-251. 3
- 1997 *Biondi, F.*, C.B. Lange, M.K. Hughes, and W.H. Berger. Inter-decadal signals during the last millennium (AD 1117-1992) in the varve record of Santa Barbara basin, California. **Geophysical Research Letters** 24: 193-196. 3
- 1996 *Biondi, F.* Decadal-scale dynamics at the Gus Pearson Natural Area: evidence for inverse (a)symmetric competition? **Canadian Journal of Forest Research** 26: 1397-1406. 3
- 1994 *Biondi, F.*, D.E. Myers, and C.C. Avery. Geostatistically modeling stem size and increment in an old-growth forest. **Canadian Journal of Forest Research** 24: 1354-1368. 3
- 1993 *Biondi, F.* Climatic signals in tree-rings of *Fagus sylvatica* L. from the central Apennines, Italy. **Acta Oecologica** 14: 57-71. 3
- 1993 *Biondi, F.*, and S. Visani, 1993. Cronologie dendroanulari per la Penisola Italiana [Tree-ring chronologies for the Italian Peninsula; in Italian with English abstract]. **Annali della Facoltà di Agraria**, Catholic University of Milan, Italy, 33(1): 3-23.
- 1992 *Biondi, F.* Development of a tree-ring network for the Italian Peninsula. **Tree-Ring Bulletin** 52: 15-29. 3
- 1992 *Biondi, F.*, J.O. Klemmedson, and R.O. Kuehl. Dendrochronological analysis of single-tree interactions in mixed pine-oak stands of central Arizona, U.S.A. **Forest Ecology and Management** 48: 321-333. 3
- 1992 *Biondi, F.*, L. Mignanego, and G. Schenone. Correlation between environmental parameters and leaf injury in *Nicotiana tabacum* L. cv. "Bel-W3". **Environmental**

Monitoring and Assessment 22: 73-87. 3

1992 Mignanego, L., *F. Biondi*, and G. Schenone. Ozone biomonitoring in northern Italy.

Environmental Monitoring and Assessment 21: 141-159. 3

1990 *Biondi, F.* Confronto dendrocronologico fra indici di competizione [Dendrochronological comparison between indices of competition; in Italian with English abstract]. **Annali della Facoltà di Agraria**, Catholic University of Milan, Italy, 30(2): 107-124.

1988 *Biondi, F.* Dendrocronologia e indici di competizione per singoli alberi [Dendrochronology and competition indices for individual trees; in Italian with English summary]. **Monti e Boschi** 39(6): 11-15.

1988 *Biondi, F.* Studi dendrocronologici in località appenniniche: primo rapporto [Dendrochronological studies in the Apennines: a first report; in Italian]. **Informatore**

F. Biondi - CURRICULUM

- 9 -

Botanico Italiano 20(1): 515-521.

1987 *Biondi, F.*, and T.W. Swetnam. Box-Jenkins models of forest interior tree-ring chronologies. **Tree-Ring Bulletin** 47: 71-95. 3

3.1.2. Books and Book Chapters

(accepted) *Biondi, F.*, and I. Galindo Estrada. Tree-Ring Evidence for the 1913 Eruption of Volcán de Fuego de Colima, Mexico. In: M. Stoffel, M. Bollschweiler, D.R. Butler, and B.H. Luckman (editors), **Tree-Ring Analysis in Natural Hazards Research**, Springer Series “Advances in Global Change Research”.

(accepted) Villalba, R., Luckman, B.H., Boninsegna, J., D'Arrigo, R.D., Lara, A., Villanueva-Diaz, J., Masiokas, M., Argollo, J., Soliz, C., LeQuesne, C., Stahle, D., Roig, F., Aravena, J.C., Wiles, G., Jacoby, G., Hartsough, P., Wilson, R.J.S., Watson, E., Cook, E.R., Cerano-Paredes, J., Therrell, M., Cleaveland, M., Morales, M.S., Moya, J., Pacajes, J., Massacchesi, G., *Biondi, F.*, Urrutia, R., and Martinez Pastur, G. Dendroclimatology from regional to continental scales: Understanding regional processes to reconstruct large-scale climatic variations across the Western Americas. In: M.K. Hughes, T.W. Swetnam, and H.F. Diaz (editors), **Dendroclimatology: Progress and Prospects**. Springer Series “Developments in Paleoecological Research”.

2009 Kozubowski, T.J., A.K. Panorska, and *F. Biondi*. Mixed multivariate models for random sums and maxima. In A. SenGupta (editor), **Advances in Multivariate Statistical Methods**, Vol. 4. Statistical Science and Interdisciplinary Research, World Scientific, Singapore, pp. 145-171.

2008 *Biondi, F.* and F. Qeadan. Removing the tree-ring width biological trend using expected basal area increment. In: S.D. Olberding and M.M. Moore (technical coordinators), **Fort Valley Experimental Forest - A Century of Research, 1908–2008**. Conference Proceedings, USDA Forest Service, Rocky Mountain Research Station, RMRS-P-55, Fort Collins, CO, pp. 124-131.

2006 North, G. R., *Biondi, F.*, Bloomfield, P., Christy, J. R., Cuffey, K. M., Dickinson, R. E., Druffel, E. R., Nychka, D., Otto-Bliesner, B., Roberts, N., Turekian, K. K., Wallace, J. M., **Surface Temperature Reconstructions for the Last 2000 Years**. National Research Council, The National Academies Press, Washington, D.C., 145

pp. 3

2002 Redmond, K.T., Y. Enzel, P.K. House, and *F. Biondi*. Climate variability and flood frequency at decadal to millennial time scales. In: P.K. House, R.H. Webb, V.R. Baker, and D.R. Levish (editors), **Ancient Floods, Modern Hazards: Principles** *F. Biondi - CURRICULUM*

- 10 -

and Applications of Paleoflood Hydrology, Water Science and Application Vol.5, American Geophysical Union, San Francisco, CA, pp. 21-45. 3

1999 *Biondi, F.* A comparison between repeated timber inventories and dendrochronological time series for forest monitoring. In: R. Wimmer and R.E.

Vetter (editors), **Tree-Ring Analysis: Biological, Methodological and Environmental Aspects**, IUFRO/CAB International, New York, pp. 215-229.

1998 *Biondi, F.* Twentieth-century growth trends at the Gus Pearson Natural Area, Arizona, USA. In: F. Dallmeier and J.A. Comiskey (editors), **Forest Biodiversity in North, Central and South America, and the Caribbean: Research and Monitoring**, Man and the Biosphere Series, Vol.21. Unesco and The Parthenon Publishing Group, Pearl River, New York, pp. 107-147.

1996 *Biondi, F.*, and S. Visani. Recent developments in the analysis of an Italian tree-ring network with emphasis on European beech (*Fagus sylvatica* L.). In J.S. Dean, D.M. Meko and T.W. Swetnam (editors), **Tree Rings, Environment and Humanity**. *Radiocarbon* Special Volume, Tucson, AZ, pp. 713-725. 3

1992 *Biondi, F.* Four tree-ring chronologies for the Italian Peninsula. In T.S. Bartholin, B.E. Berglund, D. Eckstein, F.H. Schweingruber (editors), **Tree Rings and Environment**, *LUNDQUA Report 34*, Lund, Sweden, pp. 41-44. 3

1992 *Biondi, F.*, J.O. Klemmedson and R.O. Kuehl. Tree-ring analysis of pine-oak interactions in central Arizona. In T.S. Bartholin, B.E. Berglund, D. Eckstein, F.H. Schweingruber (editors), **Tree Rings and Environment**, *LUNDQUA Report 34*, Lund, Sweden, pp. 45-52.

3.1.3. Other One-Time Publications

2003 Weinheimer, A. and *F. Biondi*. Paleoclimatology: Varves. In: J.R. Holton, J.A. Pyle, and J.A. Curry (editors), **Encyclopedia of Atmospheric Sciences**, Academic Press, London, Vol.4, pp. 1680-1684. 3

2002 Patil, R., R. Elston, and *F. Biondi*. Programming ArcIMS ActiveX connector with ASP for different browsers/platforms. In **Proceedings of the 22nd Annual ESRI International User Conference**, Paper 1248, Published on the Internet, <http://gis.esri.com/library/userconf/proc02/pap1248/p1248.htm>

2001 *Biondi, F.* Dendrochronology. In: Richard Robinson (editor), **Plant Sciences for Students**, Vol. 2, Macmillan Reference USA and Gale Group, New York, pp. 65-68.3

1994 *Biondi, F.* Spatial and Temporal Reconstruction of Twentieth-Century Growth Trends in a Naturally-Seeded Pine Forest. Doctoral Dissertation, Publication No.

F. Biondi - CURRICULUM

- 11 -

9432850, **University Microfilms International**, 258 pp.

1987 *Biondi, F.* Influence of Gambel Oak on Radial Growth of South-western Ponderosa Pine: A Dendrochronological Study. Master of Science Thesis, Publication No.

1332450, **University Microfilms International**, 95 pp.

1985 *Biondi, F.* Analisi dendrocronologica di antichi manufatti lignei toscani

[Dendrochronological analysis of ancient wooden artifacts from Tuscany; in Italian].
Doctoral Thesis. Dipartimento di Tecnologia e Assestamento Forestale, Facoltà di
Scienze Agrarie e Forestali, Università degli Studi di Firenze, Italy, 125 pp.

3.2. Non-Refereed Publications

3.2.1. Journal Articles

2006 *Biondi, F.* Getting the pulse of the trees. **The Midden** 6(2): 3. 3

2002 *Biondi, F.* Treeline Dendroclimatology in the North American Tropics. **PAGES
News** 10(1): 9-10. 3

3.2.2. Conference Proceedings Abstracts and Papers

(accepted) *Biondi, F.* Testing the pyroclimatic hypothesis for Mt. Irish, Nevada, USA.
WorldDendro Conference, Rovaniemi, Finland.

(accepted) Bunn, A., and *F. Biondi.* Dendrochronology in R with the dplR library. WorldDendro
Conference, Rovaniemi, Finland.

(accepted) Hoover, K., S.R. Poulson, *F. Biondi,* and S.J. Underwood. Eco-hydrological
pathways inferred from stable isotopes in a *Pinus ponderosa* and *Pinus monophylla*
woodland of the Sheep Range, southern Great Basin, USA. Annual Meeting of the
Association of American Geographers, Washington, D.C.

(accepted) Vittori, J., L.S. Saito, *F. Biondi,* and J. Salas. A novel approach for reconstructing
past streamflows using watershed modeling in the upper Walker River basin,
California. Annual Meeting of the Nevada Water Resources Association, Las Vegas,
Nevada.

2009 *Biondi, F.* Recent increase in maximum temperature at the tropical treeline of North
America. *EOS Transactions of the American Geophysical Union*, 90(52) Fall
Meeting Supplement, San Francisco, California. Abstract B33A-0361.

F. Biondi - CURRICULUM

- 12 -

2009a *Biondi, F.,* and S. Strachan. A 2300-year tree-ring chronology and its climatic
implications for the eastern Sierra Nevada/western Great Basin, *Proceedings of the
International Symposium on Terminus Lakes: Preserving Endangered Lakes
Through Research.* University of Nevada, Reno, p. 38.

2009b *Biondi, F.,* and S. Strachan. An expanded tree-ring network for eco-hydro-climatic
research in the Great Basin of North America. *Abstracts of the Annual Meeting of the
Association of American Geographers,* Paper Session on “Climate, Wildfire, and
Woodland Dynamics in the Great Basin of North America – II”, Las Vegas, NV.

2009 *Biondi, F.,* S. Strachan, and J. Leising. Tree-ring extension of hydrological records
for selected eastern Nevada valleys: Building the dataset. Treeflow Workshop on
"Tree-ring reconstructions of streamflow and climate and their application to
Colorado River Basin water management", Boulder City, Nevada.

2009 S. Strachan and *F. Biondi.* Precise Dating of Comstock-Era Charcoal Ovens in the
Great Basin: A Dendrochronological Perspective. *Abstracts of the Annual Meeting of
the Association of American Geographers,* Paper Session on “Climate, Wildfire, and
Woodland Dynamics in the Great Basin of North America – II”, Las Vegas, NV.

2009 Cheek, J., *F. Biondi,* R. Tausch, and J. Sibold. Fuel Analysis in Upper Elevation
Pinyon-Juniper Woodlands of Lincoln County, NV. *Abstracts of the Annual Meeting
of the Association of American Geographers,* Paper Session on “Climate, Wildfire,
and Woodland Dynamics in the Great Basin of North America – I”, Las Vegas, NV.

2009 Saito, L.S., *F. Biondi,* J. Salas, and S. Strachan. Combining a water balance model

for streamflow simulations with long tree-ring records to improve estimation of water resources variability. *EOS Transactions of the American Geophysical Union*, 90(52) Fall Meeting Supplement, San Francisco, California. Abstract H23I-05.

2009 Bradley, M., R. Tausch, and F. Biondi. Pre- and Post-Settlement Stand Development of Woodland Ecosystems in Lincoln County, Nevada. *Abstracts of the Annual Meeting of the Association of American Geographers*, Paper Session on "Climate, Wildfire, and Woodland Dynamics in the Great Basin of North America – I", Las Vegas, NV.

2009 Kilpatrick, M., J.S. Sibold, S. Strachan, and F. Biondi. Tree-ring Based Fire History of the Clover Mountains, Lincoln County, Nevada. *Abstracts of the Annual Meeting of the Association of American Geographers*, Paper Session on "Climate, Wildfire, and Woodland Dynamics in the Great Basin of North America – I", Las Vegas, NV.

2009 Solander, K., L. Saito, J. Salas, and F. Biondi. The Application of a Dendro-Hydrologic Model to the Upper Meadow Valley Wash Watershed, Lincoln County, Nevada. *Abstracts of the Annual Meeting of the Association of American Geographers*, Paper Session on "Climate, Wildfire, and Woodland Dynamics in the Great Basin of North America – I", Las Vegas, NV.

F. Biondi - CURRICULUM
- 13 -

Great Basin of North America – II", Las Vegas, NV.

2009 Saito, L. S., K. Solander, F. Biondi, J. Salas, and J. Vittori. Multi-century streamflow simulation using a water balance model for paleoreconstructions, *Proceedings of the International Symposium on Terminus Lakes: Preserving Endangered Lakes Through Research*. University of Nevada, Reno, pp. 34-35.

2008a Biondi, F. Daily trends and diurnal weather cycles at the tropical treeline in the North American monsoon region. *Abstracts of the Regional Climate Forum for Northwest Mexico and the Southwest United States*, CICESE, Ensenada, Baja California, Mexico.

2008b Biondi, F. Is it time to rethink the "conservative" option? An alternative approach to removing the biological trend. *Abstracts of the First American Dendrochronological Conference (AmeriDendro)*, Vancouver, British Columbia, Canada.

2008c Biondi, F. Inequality in paleorecords: an interdisciplinary tale. *Abstracts of the Annual Meeting of the Association of American Geographers*, Paper Session on "Advances in Paleoclimatology IV", Boston, MA.

2008 Biondi, F., S. Strachan, and J. Leising. Tree-ring extension of hydrological records for selected eastern Nevada valleys: Building the dataset. *Treeflow Workshop on "Tree-ring reconstructions of streamflow and climate and their application to Colorado River Basin water management"*, Boulder City, Nevada, 2008.

2008 Biondi, F., T.J. Kozubowski, A.K. Panorska, and S.D. Strachan. Estimating the likelihood of eco-hydro-climatic episodes from tree-ring records. *Abstracts of the 8th National Conference on Science, Policy and the Environment on Climate Change: Science & Solutions*, National Council for Science and the Environment, Washington D.C., USA.

2008 Sibold, J.S., and F. Biondi. The role of ignitions in the occurrence of wildfire in forest ecosystems of the Great Basin. *Abstracts of the Annual Meeting of the Association of American Geographers*, Paper Session on "Wildfires in a changing environment - Recent Observations", Boston, MA.

2008 Switzer, P., and F. Biondi. Using Maximum Autocorrelation Factors (MAFS) to

Identify Common Trends in Proxy Data: A Tree-Ring Case Study. *EOS Transactions of the American Geophysical Union*, 89(53), Fall Meeting Supplement, San Francisco, California. Abstract PP51C-1502.

2008 Dilts, T., J.S. Sibold, and *F. Biondi*. A weights-of-evidence model for mapping the probability of fire occurrence in Lincoln County, Nevada. *Abstracts of the Annual Meeting of the Association of American Geographers*, Paper Session on "Wildfires in a changing environment - What does the future hold?", Boston, MA.

F. Biondi - CURRICULUM

- 14 -

2008 Jamieson, L., J.S. Sibold, and *F. Biondi*. Fire history of a sky island forest ecosystem in the southern Great Basin. *Abstracts of the Annual Meeting of the Association of American Geographers*, Paper Session on "Fire & Forest", Boston, MA.

2008 Hartsough, P., S.R. Poulson, G. Schleser, and *F. Biondi*. Stable isotopes from a high elevation tropical treeline environment: Spatial and temporal variability. *Abstracts of the ISOSCAPES 2008 Conference*, Santa Barbara, California.

2008 Jensen, S.E., D.S. Brothers, J.A. Kleppe, G. Kent, S.B. Smith, E.A. Johnstone, *F. Biondi*, N. Driscoll, and R. Karlin. Testing for Holocene hydroclimatic change in the Sierras: New insights from Fallen Leaf Lake, Lake Tahoe Basin, California. *EOS Transactions of the American Geophysical Union*, 89(53), Fall Meeting Supplement, San Francisco, California. Abstract PP41B-1441.

2007 *Biondi, F.* Diurnal weather cycles at the tropical treeline in the North American Monsoon region. *EOS Transactions of the American Geophysical Union*, 88(52), Fall Meeting Supplement, San Francisco, California. Abstract PP13D-02.

2007 *Biondi, F.* "Give Climate a Chance": Estimates from Tree Rings. *Abstracts of the 2007 Climate Change Symposium*, Nevada Water Resources Association, Las Vegas, Nevada.

2007 *Biondi, F.*, and S. Strachan. Spatial and temporal patterns identified in a *Pinus monophylla* tree-ring network. *Abstracts of the 103rd Annual Meeting of the Association of American Geographers*, Paper Session on "Dendrochronology II", San Francisco, CA.

2007 *Biondi, F.*, A.K. Panorska, and T.J. Kozubowski. Modeling episode peak and duration for eco-hydro-climatic applications. *Abstracts of the IUGG 2007 Conference*, Session HW2003 "Analysis of Variability in Hydrological Data Series", Perugia, Italy.

2007 Monnar, R., P. Hartsough, S. Poulson, K. Snyder, and *F. Biondi*. Diurnal Cycles of Leaf Water Stable Isotopes in Two Pine Species. *Abstracts of the 103rd Annual Meeting of the Association of American Geographers*, Paper Session on "Dendrochronology II", San Francisco, CA.

2006 *Biondi, F.* Underwater Dendrochronology of Sierra Nevada Lakes. *Abstracts of the Workshop on Science as a Tool in Lake Tahoe Basin Management*, pp. 40-41. Sierra Nevada College, Incline, Nevada.

2006 *Biondi, F.*, Strachan, S. D., Mensing, S. ¹⁴C Analysis Confirms Crossdating of Sagebrush Growth Layers. *Abstracts of the Mountain Climate Sciences Symposium (MTNCLIM)*, Consortium for Integrated Climate Research in Western Mountains (CIRMOUNT), Mt. Hood, Oregon.

F. Biondi - CURRICULUM

- 15 -

2006 *Biondi, F.*, J.A. Kleppe, D. Brothers, and G. Kent. Underwater Dendrochronology of the Sierra Nevada: Testing the Medieval Mega-Drought Hypothesis. *EOS Transactions of the American Geophysical Union*, 87(52) Fall Meeting Supplement, San Francisco, California. Abstract U12B-07.

2006 *Biondi, F.*, Kozubowski, T. J., Panorska, A. K., Strachan, S. D. Give the 20th century a chance: Applying dendrochronology to resource management. *Abstracts of the 7th International Conference on Dendrochronology*, The Chinese Academy of Sciences, Beijing, China.

2006 Hartsough, P.C., *F. Biondi*, and S. Poulson. High Elevation Monitoring in a Tropical Treeline Environment. *Abstracts of the 102nd Annual Meeting of the Association of American Geographers*, Paper Session on “Dendrochronology VI: Tropical Dendrochronology I”, Chicago, Illinois.

2006 Kirchner, P., *F. Biondi*, and J. McConnell. Dendrochemistry of Yellow Pines: A Comparison of Multiple Samples. *Abstracts of the 102nd Annual Meeting of the Association of American Geographers*, Paper Session on “Dendrochronology V: Dendrochemistry and Stable Isotopes”, Chicago, Illinois.

2006 Strachan, S., *F. Biondi*, and J. Kleppe. Tree-Ring Dating of Submerged Trees in Fallen Leaf Lake, California. *Abstracts of the 102nd Annual Meeting of the Association of American Geographers*, Paper Session on “Dendrochronology II: Dendroclimate”, Chicago, Illinois.

2006 Kozubowski, T. J., Panorska, A. K., *Biondi, F.* Certain mixed multivariate models connected with random sums and maxima, with applications to climatology and finance. *Abstracts of the Conference on Multivariate Statistical Methods for the 21st Century*, Kolkata, India.

2006 Di Filippo, A., *F. Biondi*, Piovesan, G., Schirone, B. A Tree-Ring Based Bioclimatic Classification of Italian Forests. *Abstracts of the 7th International Conference on Dendrochronology*, The Chinese Academy of Sciences, Beijing, China.

2006 Monnar, R.D., P.C. Hartsough, S. Poulson, and *F. Biondi*. Daily Cycle of Leaf Water Stable Isotopes in Two Pine Species. *Abstracts of the 102nd Annual Meeting of the Association of American Geographers*, Poster Session on “Biogeography I”, Chicago, Illinois.

2005a *Biondi, F.* Environmental Signals in Tree Rings. *Abstract Book of the EuroDendro 2005 International Conference of Dendrochronology*, p.11. M. Sarlatto, A. Di Filippo, G. Piovesan, and M. Romagnoli (Eds.), Editore Sette Città, Viterbo, Italy; 80 pp.

2005b *Biondi, F.* Data and Models. *Lecture Notes from the Workshop on Interdisciplinary Modeling for Aquatic Ecosystems*. L. Saito and H. Segale (Eds.), Tahoe City, *F. Biondi - CURRICULUM*

- 16 -

California.

2005a *Biondi, F.*, and S. Strachan. Pyroclimatic Hypothesis for Mt. Irish, Nevada, Derived from Tree-Ring Records. Workshop on Fire History and Climate Synthesis in Western North America, Northern Arizona University, Flagstaff.⁴

2005b *Biondi, F.*, and S. Strachan. Great Basin Tree-Ring Records from Lower-Forest-Border Sites. *Abstracts of the Mountain Climate Sciences Symposium (MTNCLIM)*, Consortium for Integrated Climate Research in Western Mountains (CIRMOUNT), Chico Hot Springs, Montana. 3

- 2005c Biondi, F., and S. Strachan. A *Pinus monophylla* Tree-ring Network for Hydroclimatic Studies in the Great Basin of North America. *Abstracts of the 101st Annual Meeting of the Association of American Geographers*, Special Session on “Dendrochronology II”, Denver, Colorado.
- 2005 Biondi, F., T.J. Kozubowski, A.K. Panorska, and S. Strachan. “Give Climate a Chance”: Estimates from Tree Rings. Planning Workshop to Develop Hydroclimatic Reconstructions for Decision Support in the Colorado River Basin, ISPE, Tucson, Arizona. ³
- 2005 Kirchner, P., F. Biondi, and J. McConnell. Tree Rings and Trace Metals: A Method for Analysis of Site Specific Histories. *Abstracts of the 101st Annual Meeting of the Association of American Geographers*, Special Session on “Dendrochronology II”, Denver, Colorado.
- 2005 Strachan, S., F. Biondi, and J. Kleppe. Tree-Ring Dating of Submerged Wood Samples Recovered from Fallen Leaf Lake, California. Workshop on Coring in the Lake Tahoe Basin, Tahoe City, California.
- 2005 Di Filippo, A., F. Biondi, M. Brunetti, K. Cûfar, M. de Luis Arrillaga, M. Grabner, M. Maugeri, T. Nanni, G. Piovesan, M. Romagnoli, B. Schirone. Spatial and Altitudinal Climatic Signals Identified in a Beech (*Fagus sylvatica* L.) Tree-ring Network on the Eastern Alps. *Abstract Book of the EuroDendro 2005 International Conference of Dendrochronology*, pp. 14-15. M. Sarlatto, A. Di Filippo, G. Piovesan, and M. Romagnoli (Eds.), Editore Sette Città, Viterbo, Italy; 80 pp.
- 2004 Biondi, F., T.J. Kozubowski, A.K. Panorska, and S. Strachan. A 2000-year Hydroclimatic Reconstruction for the Walker River Basin, California and Nevada, USA. *Abstracts of the 100th Annual Meeting of the Association of American Geographers*, Special Session on “Drought, Water Supply, Fire: How Does Regional Science Serve Society?”, Philadelphia, Pennsylvania.
- ⁴Poster available electronically as a PDF file from <http://woods.geography.unr.edu/Posters>
- F. Biondi - CURRICULUM**
- 17 -
- 2004 Biondi, F., G.D. McCurdy, P.C. Hartsough, and S. Strachan. Daily Weather and Tree Growth at the Tropical Treeline of North America. *Abstracts of the Meeting on Tree Rings and Climate: Sharpening the Focus*, Tucson, Arizona; p.8. ³
- 2004 Biondi, F., T.J. Kozubowski, A.K. Panorska, L. Saito, and S. Strachan. New Approaches in Dendrohydrology: Theory and Preliminary Application to a 2300-Year Long Record for the Walker River Basin, California and Nevada, USA. *Abstracts of the Meeting on Tree Rings and Climate: Sharpening the Focus*, Tucson, Arizona; pp.6-7.
- 2004 Biondi, F., T.J. Kozubowski, and A.K. Panorska; K.T. Redmond, and S. Strachan. Drought Risk Estimation from Tree Rings. *Abstracts of the Mountain Climate Sciences Symposium*, South Lake Tahoe, California.
- 2004 Hartsough, P., and F. Biondi. High Elevation Monitoring in the North American Tropics: Ecosystem/Climate Relationships on Nevado de Colima, Mexico. *EOS Transactions of the American Geophysical Union*, 85(46), Fall Meeting Supplement, San Francisco, California. Abstract U53A-0709. ³
- 2003 Biondi, F. Geostatistical Modeling of Monthly Monsoon Precipitation in Mexico. NOAA, *Abstracts of the 28th Annual Climate Diagnostics and Prediction Workshop*, Desert Research Institute, Reno, NV.

2003 *Biondi, F.*, and K. Waikul. DendroClim: New software for the analysis of climatetree growth relationships over time. *Abstracts of the 99th Annual Meeting of the Association of American Geographers*, Special Session on “Advances in Dendrochronology I”, New Orleans, Louisiana.

2003 *Biondi, F.*, T.J. Kozubowski, and A.K. Panorska. Stochastic identification of the strongest, greatest, highest episode in a paleo record. In *Abstracts of the Inaugural Meeting of the International Biogeography Society*, University of Nevada, Las Vegas, Abstract 97.

2003 *Biondi, F.*, G.D. McCurdy, P.C. Hartsough, and S. Strachan. High Elevation Weather at a Site in the North American Monsoon Region. NOAA, *Abstracts of the 28th Annual Climate Diagnostics and Prediction Workshop*, Desert Research Institute, Reno, NV.

2003a Hartsough, P., and *F. Biondi*. Characterization of a high elevation tropical pine forest for isotopic analysis of the North American Monsoon System: Nevado de Colima, Mexico. *EOS Transactions of the American Geophysical Union*, 84(47), Fall Meeting Supplement, Special Session on “Environmental Assessment From the Width, Anatomy, and Chemical Composition of Tree Rings”, San Francisco, California. Abstract B11C-0709.

F. Biondi - CURRICULUM

- 18 -

2003b Hartsough, P., and *F. Biondi*. The importance of high elevation monitoring in a tropical treeline environment: A project update from south western Mexico.

Abstracts of the Fourth Annual Science Meeting, IAI CRN 03, IANIGLA-CRICYT, Mendoza, Argentina; p. 18

2003 Panorska, A.K., T.J. Kozubowski, and *F. Biondi*. Symmetry under a skew Laplace model: A bridge to knowledge about Pacific climate. *Abstracts of the Joint Statistical Meeting*, San Francisco, California.

2002 *Biondi, F.* and R. J. Van Lieshout. Tropical treelines and tree rings in the North American Monsoon region. In: G.J. West and L.D. Buffaloe (eds.), *Proceedings of the 18th Annual Pacific Climate (PACLIM) Workshop*. Technical Report 68, Interagency Ecological Program for the San Francisco Estuary, pp. 146-147.

2002a *Biondi, F.*, T.J. Kozubowski, and A.K. Panorska. Stochastic modelling of regime changes. *EOS Transactions of the American Geophysical Union*, 83(47), Fall Meeting Supplement, Abstract H61D-04.

2002b *Biondi, F.*, T.J. Kozubowski, and A.K. Panorska. Regime shifts over time: from graph to probability model. *Abstracts of the 98th Annual Meeting of the Association of American Geographers*, Special Session on “Paleorecords of Changing Climate Variability (II)”, Los Angeles, California.

2002 Enzel, Y., K.T. Redmond, P.K. House, and *F. Biondi*. Climate variability and flood frequency at decadal to millennial time scales. *Proceedings of the Annual Meeting of the Geological Society of America*, Session No. 225 on “Flood Hazard on Dynamic Rivers: Human Modification, Climate Change, and the Challenge of Non-Stationary Hydrology”, Denver, Colorado. Abstract #39614.

2002 Hartsough, P. and *F. Biondi*. Update of North American Monsoon work on Nevado de Colima, Mexico. In *Abstracts of Climate Variability from Treeline Environments, Third Annual Science Meeting, IAI CRN03, Oaxaca, Mexico*, p. 7.

2002 Van Lieshout, R. J. and *F. Biondi*. The North American Monsoon in West-Central

Mexico. In: G.J. West and L.D. Buffaloe (eds.), *Proceedings of the 18th Annual Pacific Climate (PACCLIM) Workshop*. Technical Report 68, Interagency Ecological Program for the San Francisco Estuary, p.180.

2001 *Biondi, F.*, and R. J. Van Lieshout. Tropical treeline dendrochronology of North America: A progress report. In *Abstracts of the Association of American Geographers 97th Annual Meeting*, Special Session on Positions in Dendroclimatology and Dendroecology, New York.

2001a *Biondi, F.*, T.J. Kozubowski, and A.K. Panorska. A Probability Model for Analyzing Regime Shifts over Time. *EOS Transactions of the American Geophysical Union*, 82(47), Fall Meeting Supplement, Special Session on “Reconstructions of Nineteenth Century Climate”, San Francisco, California. Abstract GC22A-0270.

2001b *Biondi, F.*, T. J. Kozubowski, and A.K. Panorska. Stochastic Modeling of Regime Shifts and its Application to the Pacific Decadal Oscillation. *Proceedings of the International Workshop on Annual Records of Tropical Systems (ARTS)*, Noumea, New Caledonia, pp 10-14.

2000a *Biondi, F.* Effect of the 1913 Volcan de Colima eruption on tropical tree rings. *Abstracts of the International Conference on Dendrochronology for the Third Millennium*, Mendoza, Argentina, p.152.

2000b *Biondi, F.* Multi-century tree-ring chronologies from the tropical treeline. *Abstracts of the International Conference on Dendrochronology for the Third Millennium*, Mendoza, Argentina, p.219.

2000c *Biondi, F.* A simple technique for dynamical calibration of dendroclimatic models. *Abstracts of the International Conference on Dendrochronology for the Third Millennium*, Mendoza, Argentina, p.48.

2000 *Biondi, F.*, and J.E. Fessenden. CO₂ degassing and lodgepole pine growth at Mammoth Mountain, California, USA. In D. Danta (ed.), *Yearbook of the Association of Pacific Coast Geographers*, Vol. 62, University of Hawai'i Press, pp. 170-171.

2000 *Biondi, F.*, A. Gershunov, and D.R. Cayan. Winter PDO reconstructed from Southern California tree-ring records. Page 26 in *Abstracts of “Beyond El Niño: A Conference on Pacific Climate Variability and Marine Ecosystem Impacts, from the Tropics to the Arctic”*, La Jolla, California, U.S.A.

2000 *Biondi, F.*, C. Isaacs, M.K. Hughes, D.R. Cayan, and W.H. Berger. The near-1600 dry/wet knock-out: Linking terrestrial and near-shore ecosystems. NOAA, *Proceedings of the 24th Annual Climate Diagnostics and Prediction Workshop*, National Technical Information Service, U.S. Department of Commerce, Springfield, VA, pp. 76-79. ³

1999 *Biondi, F.* and D.R. Cayan. Precipitation variability from 1660 to 1992 reconstructed from Southern and Baja California tree rings. *Abstracts of the Conference on Reconstructing Climatic Variability from Historical Sources and Other Proxy Records*, Manzanillo, Colima, Mexico, p.32.

1999 *Biondi, F.*, D.R. Cayan, and W.H. Berger. Decadal-scale changes in Southern California tree-ring records. In T.R. Karl (ed.), *Proceedings of the 10th Symposium on Global Change Studies*, American Meteorological Society, Boston, MA, pp. 303-306. ³

1999 Biondi, F., D.L. Perkins, D.R. Cayan, and W.H. Berger. An 857-year reconstruction
F. Biondi - CURRICULUM

- 20 -

of July temperature from Idaho tree rings. In T.R. Karl (ed.), *Proceedings of the 10th Symposium on Global Change Studies*, American Meteorological Society, Boston, MA, pp. 307-308. 3

1999 Biondi, F., S.H. Bullock, N.E. Martijena, D.R. Cayan, W.H. Berger, and K. Berger. Dendroclimatology of *Pinus jeffreyi* in Baja California, Mexico. *Abstracts of the Third Baja California Botanical Symposium*, CIBNOR, La Paz, Baja California Sur, Mexico.

1999 Biondi, F., I. Galindo Estrada, A. Burton, S.E. Metcalfe, D.R. Cayan, and W.H. Berger. A 400-year tree-ring chronology from the North American Tropics. In T.R. Karl (ed.), *Proceedings of the 10th Symposium on Global Change Studies*, American Meteorological Society, Boston, MA, pp. 161-162. 3

1999 Biondi, F., C. Isaacs, M.K. Hughes, A. Schimmelman, C. Lange, D.R. Cayan, and W. H. Berger. Linking terrestrial and near-shore ecosystems: The near-1600 dry/wet episode in the American Southwest. *Abstracts of the 1999 Fall Meeting of the American Geophysical Union*, Special Session on "Linking Continental and Ocean Paleorecords: The PEP Transects", San Francisco, California. Abstract U12A-04.

1998 Biondi, F. Evolutionary and moving response functions in dendroclimatology. *Abstracts of the 7th International Meeting on Statistical Climatology*, Whistler, British Columbia, Canada, p.17.

1998 Biondi, F., C.B. Lange, A.L. Weinheimer, D.R. Cayan, and W.H. Berger. The Near-AD 1600 Episode as recorded in varves and tree rings of Western North America. *Abstracts of PAGES Open Science Meeting*, Past Global Changes and their Significance for the Future, London, U.K., p.47.

1997a Biondi, F. A comparison between tree-ring chronologies and repeated inventories for forest health monitoring. *Abstracts of the IUFRO International Conference on Forest Products for Sustainable Forestry*, Washington State University, Pullman, p.228.

1997b Biondi, F. Life and death in a southwestern ponderosa pine forest. In *Abstracts of the First Biennial North American Forest Ecology Workshop*, North Carolina State University, Raleigh.

1997 Biondi, F., D.R. Cayan and W.H. Berger. Long-term response of Torrey pine to coastal climate: precipitation, temperature and fog. In: C.M. Isaacs and V.L. Tharp (eds.), *Proceedings of the Thirteenth Annual Pacific Climate (PACCLIM) Workshop*. Technical Report 53, Interagency Ecological Program for the Sacramento-San Joaquin Estuary, pp. 141-159.

1997 Biondi, F., C. Lange and A. Schimmelman. The near-AD 1600 event: the case for supraregional relevance. *Abstracts of the Association of American Geographers Annual Meeting*, Special Session on Global Climate Change and Variability, Fort

F. Biondi - CURRICULUM

- 21 -

Worth, p.23.

1997 Biondi, F., C.B. Lange, M.K. Hughes and W.H. Berger. The near-AD 1600 multiproxy puzzle. In: C.M. Isaacs and V.L. Tharp (eds.), *Proceedings of the Thirteenth Annual Pacific Climate (PACCLIM) Workshop*. Technical Report 53, Interagency Ecological Program for the Sacramento-San Joaquin Estuary, pp. 169-191. 3

- 1997 *Biondi, F.*, C.B. Lange, A.L. Weinheimer, D.R. Cayan, and W.H. Berger. Decadal-scale changes in varves and tree rings as indicators of climatic variability. *Program & Abstracts, Western Society of Naturalists 78th Annual Meeting, Symposium on Recent Climate Change: Effects on Nearshore and Terrestrial Ecosystems in Southwestern North America*, Monterey, CA, p.19.
- 1997 *Biondi, F.*, D.W. Stahle, D.L. Perkins, D.R. Cayan, and W.H. Berger. Retrieving multi-decadal climate trends from long tree-ring records. *Abstracts of the AGU Fall 1997 Meeting, Special Session on Five Centuries of Climate Change: What Do Proxies Tell Us?*, San Francisco, CA. Abstract U42A-13.
- 1996a *Biondi, F.* What happened around AD 1600? *Abstracts of the 1996 Southern California Environment and History Conference*, California State University, Northridge, p.2.
- 1996b *Biondi, F.* Coastal dendroclimatology: The Torrey pine story. *Abstracts of the 1996 Southern California Environment and History Conference*, California State University, Northridge, pp 1-2.
- 1996 *Biondi, F.* and D.E. Myers. Spatial dependence of tree biomass in an old-growth forest. In: H.T. Mowrer, R.L. Czaplewski and R.H. Hamre (tech. coords.), *Spatial Accuracy Assessment in Natural Resources and Environmental Sciences: Second International Symposium*, USDA Forest Service General Technical Report RMGTR-277, Fort Collins, CO, p.717.
- 1996 *Biondi, F.*, C.B. Lange, K. Cobb and W.H. Berger. Integrating varve and tree-ring time series for Southern California climate reconstruction: A 20th century outlook. In: C.M. Isaacs and V.L. Tharp (eds.), *Proceedings of the Twelfth Annual Pacific Climate (PACCLIM) Workshop*. Interagency Ecological Program for the Sacramento-San Joaquin Estuary, Technical Report 46, p. 205.
- 1996 Martijena, N.E., *F. Biondi*, S.H. Bullock and W. Berger. Dendrocronología y la historia climática de Baja California [Dendrochronology and the climatic history of Baja California; in Spanish]. In: *Abstracts of the Symposium on The Botany Research in Baja California and Adjacent Areas*. Universidad Autónoma de Baja California, Facultad de Ciencias, Ensenada, BC (Mexico), p.23.
- 1995 *Biondi, F.*, M.K. Hughes, C.B. Lange and W.H. Berger. Evidence of near-1600 AD abrupt environmental change from the 1117-1992 AD Santa Barbara varve record.
- F. Biondi - CURRICULUM*
- 22 -
- AGU 1995 Fall Meeting Abstracts, *EOS Transactions American Geophysical Union*, Vol. 76 (Supplement), Abstract O11B-12, pp. F283-F284.
- 1995 Karl, T.R. and *F. Biondi*. Analysis of possible climate change. In: *Lecture Notes from the 1992 NOAA Colloquium on Operational Environmental Prediction*. U.S. Department of Commerce, NOAA, National Weather Service. U.S. Government Printing Office 1995-386-543/25409, pp.78-99.
- 1995 Tracton, M.S. and *F. Biondi*. Dynamical extended range forecasting. In: *Lecture Notes from the 1992 NOAA Colloquium on Operational Environmental Prediction*. U.S. Department of Commerce, NOAA, National Weather Service. U.S. Government Printing Office 1995-386-543/25409, pp.155-162.
- 1994a *Biondi, F.* and D.E. Myers. Geostatistical models of tree size and increment in an old-growth forest. In: J.M. Power, M. Strome and T.C. Daniel (compilers/editors), *Proceedings of Decision Support - 2001*, Vol. 2. Petawawa National Forestry

Institute, Chalk River, Ontario, p.598.

1994b *Biondi, F.* and D.E. Myers. Long-term spatial dependence of tree size and increment in an old-growth forest ecosystem. In: Abstracts of the 79th Annual Meeting of the Ecological Society of America, *Bulletin of the Ecological Society of America*, Vol.75 (Supplement), n.2 (PART 2), p.16.

1990 *Biondi, F.*, L. Mignanego and G. Schenone. Biological monitoring of ozone pollution in northern Italy. *Abstracts of the International Conference on Acidic Deposition: Its Nature and Impacts*. Scottish Power, Glasgow, U.K., p.256.

1988 *Biondi, F.* Considerazioni metodologiche preliminari sull'uso della dendrocronologia come strumento di analisi ambientale [Preliminary methodological considerations on using dendrochronology for environmental analysis; in Italian]. In: *Riassunti del Convegno sul Trasporto transfrontaliero di inquinanti atmosferici e stato dell'ambiente in zona alpina* [Abstracts of the Symposium on Across-Frontier Transport of Atmospheric Pollutants and Status of the Environment in the Alps], ENEL-DSR-CRTN, Milan, Italy; pp. 53-58.

1987 *Biondi, F.* A method to obtain thin cross-sections for tree-ring analysis. In: G.C. Jacoby Jr. and J.W. Hornbeck (compilers), *Proceedings of the International Symposium on Ecological Aspects of Tree-Ring Analysis*. U.S. Department of Energy, CO2 Conf8608141, Washington, DC; pp.707-717.

3.2.3. Reports

2010 *Biondi, F.* Final Report for Award # 0503722, National Science Foundation; *Stochastic Modeling of Episode Duration, Magnitude, and Peak in Long Paleo Records*. Copy on file at DendroLab, Department of Geography, UNR. 20 pp.

F. Biondi - CURRICULUM

- 23 -

2009 *Biondi, F.* Final Report for Award # 0518655, National Science Foundation; *Tracing the Waters Through the Trees: North American Monsoon Dynamics During the Past Four Centuries*. Copy on file at DendroLab, Department of Geography, UNR. 7 pp.

2009 Final Performance Report for Cooperative Agreement FAA070002 (Priority #6-25; Project #BL49); *Pre-settlement Wildfire, Drought, and Piñon Juniper Dynamics in Southeastern Nevada*. Copy on file at DendroLab, Department of Geography, UNR. 419 pp.

2009 Strachan, S.D.J., and *F. Biondi*. Report to Dr. Brian J. Andraski and Michael J. Johnson, USGS, on *Analysis of Larrea tridentata tree-ring samples for the Amargosa Desert Research Site*. Copy on file at DendroLab, Department of Geography, UNR. 11 pp.

2009 Fourth Semi-Annual Performance Report for Cooperative Agreement FAA070002 (Priority #6-25; Project #BL49); *Pre-settlement Wildfire, Drought, and Piñon Juniper Dynamics in Southeastern Nevada*. Copy on file at DendroLab, Department of Geography, UNR. 73 pp.

2008 *Biondi, F.* Final Report for Award # 0132631, National Science Foundation; *CAREER: Learning in the Woods - Decadal Climate, Water Supply, and Fire Frequency in the Great Basin*. Copy on file at DendroLab, Department of Geography, UNR. 11 pp.

2008a Strachan, S.D.J., and *F. Biondi*. Report to Joshua Tree National Park on *Dendrochronological Analysis of Increment Cores Collected from Pinus monophylla in Joshua Tree National Park, California*. Copy on file at DendroLab, Department of

Geography, UNR. 6 pp.

2008b Strachan, S.D.J., and *F. Biondi*. Report to Summit Envirosolutions on *Dendrochronological Analysis of Surface Wood Samples Associated with Charcoal Oven Features in the Cortez Mining District, Lander County, Nevada*. Copy on file at DendroLab, Department of Geography, UNR. 8 pp.

2008 Third Semi-Annual Performance Report for Cooperative Agreement FAA070002 (Priority #6-25; Project #BL49); *Pre-settlement Wildfire, Drought, and Piñon Juniper Dynamics in Southeastern Nevada*. Copy on file at DendroLab, Department of Geography, UNR. 176 pp.

2008 Second Semi-Annual Performance Report for Cooperative Agreement FAA070002 (Priority #6-25; Project #BL49); *Pre-settlement Wildfire, Drought, and Piñon Juniper Dynamics in Southeastern Nevada*. Copy on file at DendroLab, Department of Geography, UNR. 49 pp.

2007 First Semi-Annual Performance Report for Cooperative Agreement FAA070002
F. Biondi - CURRICULUM
- 24 -

(Priority #6-25; Project #BL49); *Pre-settlement Wildfire, Drought, and Piñon Juniper Dynamics in Southeastern Nevada*. Copy on file at DendroLab, Department of Geography, UNR. 26 pp.

2005 *Biondi, F.* and P. Hartsough. DendroLab Final Report, *Assessment of Present, Past, and Future Climate Variability in the Americas from Treeline Environments*, pp. 137-144. B.H. Luckman and J.A. Boninsegna (Eds.), IAI CRN03 Final Report; 177 pp.

2005a Strachan, D.J.S. and *F. Biondi*. Tree-ring Dating of Grays Crossing, California Charcoal Ovens. Phase I-III Report presented to Dr. Susan Lindström, Consulting Archaeologist. Copy on file at DendroLab, Department of Geography, UNR. 8 pp.

2005b Strachan, D.J.S. and *F. Biondi*. Tree-ring Dating of Submerged Wood Samples Recovered from Fallen Leaf Lake, California. Preliminary Report presented to Dr. John Kleppe. Copy on file at DendroLab, Department of Geography, UNR. 7 pp.

2004 *Biondi, F.* Development of a Methodology for Building Long-Term Fire History in Great Basin Valley Landscapes. Final Report presented to the Bureau of Land Management. Copy on file at DendroLab, Department of Geography, UNR. 7 pp.

2004 Strachan, D.J.S., and *F. Biondi*. Tree-ring Dating of Mt. Hope, Nevada Charcoal Ovens. Final Report presented to Summit Envirosolutions. Copy on file at DendroLab, Department of Geography, UNR. 8 pp.

2003 *Biondi, F.* High Elevation Tree Rings and Climate in the North American Tropics. Final Report presented to the National Science Foundation, Division of Atmospheric Sciences, Paleoclimate Program. Copy on file at DendroLab, Department of Geography, UNR. 5 pp.

2003 *Biondi, F.* and S. Strachan. Tree-ring Dating of Truckee Charcoal Ovens. Final Report presented to Dr. Susan Lindström, Consulting Archaeologist. Copy on file at DendroLab, Department of Geography, UNR. 10 pp.

2003 S. Strachan and *F. Biondi*. Report on Dendrochronological Analysis of Archaeological Features in the Heavenly Master Plan Area. Final Report presented to Carrie Smith, USFS Archaeologist. Copy on file at DendroLab, Department of Geography, UNR. 6 pp.

1993a *Biondi, F.* Cross-dating the Walnut Canyon tree-ring chronology. Report presented

to Dr. Charles Avery, Professor, Northern Arizona University. Copy on file at DendroLab, Department of Geography, UNR. 12 pp.

1993b *Biondi, F.* Cross-dating *Acer negundo* from Walnut Canyon National Monument.

F. Biondi - CURRICULUM

- 25 -

Report presented to Dr. Charles Avery, Professor, Northern Arizona University.

Copy on file at DendroLab, Department of Geography, UNR. 6 pp.

1993c *Biondi, F.* Cross-dating woody species from Walnut Canyon National Monument.

Report presented to Dr. Charles Avery, Professor, Northern Arizona University.

Copy on file at DendroLab, Department of Geography, UNR. 15 pp.

1993d *Biondi, F.* Analisi dendroclimatiche in località campione della penisola italiana

[Dendroclimatic analyses in selected sites of the Italian Peninsula; in Italian]. Final

Report, CRTN-ENEL, Milan, Italy; 49 pp.

1992 *Biondi, F.* Evaluation of tree-ring chronologies for the Flagstaff area. Report

presented to Dr. Charles Avery, Professor, Northern Arizona University. Copy on

file at DendroLab, Department of Geography, UNR. 20 pp.

1991 *Biondi, F.* Studi dendrocronologici e dendroclimatici in località appenniniche

[Dendrochronological and dendroclimatic studies in the Apennines; in Italian]. Final

Report, Ente Autonomo Parco Nazionale d'Abruzzo, Pescasseroli (AQ), Italy; 95 pp.

1990 *Biondi, F.* Dendroclimatologia in Italia: Analisi statistica preliminare dei rapporti fra

clima e crescita arborea [Dendroclimatology in Italy: Preliminary statistical analysis

of the relationship between climate and tree growth; in Italian and English]. Final

Report, Consiglio Nazionale delle Ricerche, Rome, Italy; 53 pp.

1990 *Biondi, F.* Rielaborazione di serie dendrocronologiche relative a M.te Gouta (IM),

M.te Mottarone (NO) e alla provincial di Bolzano e considerazioni dendroclimatiche

sull'abete bianco di M.te Gouta [Reanalysis of dendrochronological series from

Mount Gouta, Mount Mottarone, and the Bolzano Province, with dendroclimatic

studies on white fir at Mount Gouta; in Italian]. Final Report, Servizio Ambiente del

Centro di Ricerca Termica e Nucleare (ENEL), Milan, Italy; 38 pp.

1990 Mignanego, L., *F. Biondi* and G. Schenone. Biomonitoraggio dell'ozono nel Nord

Italia [Biomonitoring of ozone in northern Italy; in Italian with English abstract].

Contributi ENEL alla Conoscenza di Problematiche Ambientali, Documento N. 21.

Milan, Italy; 88 pp.

3.2.4. Research Datasets

2006 *Biondi, F.* Idaho July Temperature Reconstruction. International Tree-Ring Data

Bank. IGBP PAGES/World Data Center for Paleoclimatology (Data Contribution

Series # 2006-039). NOAA/NGDC Paleoclimatology Program, Boulder, CO.

<ftp://ftp.ncdc.noaa.gov/pub/data/paleo/treering/reconstructions/northamerica/usa>

F. Biondi - CURRICULUM

- 26 -

2001a *Biondi, F.* Tree Ring Data, Nevado de Colima, Mexico (MEXI021). International

Tree-Ring Data Bank. IGBP PAGES/World Data Center for Paleoclimatology (Data

Contribution Series #2001-064). NOAA/NGDC Paleoclimatology Program, Boulder,

CO. <ftp://ftp.ngdc.noaa.gov/paleo/treering/updates>

2001b *Biondi, F.* Pacific Decadal Oscillation Reconstruction. International Tree-Ring Data

Bank. IGBP PAGES/World Data Center-A for Paleoclimatology (Data Contribution

Series #2001-001). NOAA/NGDC Paleoclimatology Program, Boulder, CO.

<http://www.ngdc.noaa.gov/paleo/pubs/biondi2001>
1998 *Biondi, F.* Tree Ring Data, California and Baja California (CA 598-601, MEXI019). International Tree-Ring Data Bank. IGBP PAGES/World Data Center-A for Paleoclimatology (Data Contribution Series #1998-041). NOAA/NGDC Paleoclimatology Program, Boulder, CO. <ftp://ftp.ngdc.noaa.gov/paleo/treering/updates/>
1990 *Biondi, F.* Tree-Ring Data, northern Arizona and Italy. International Tree-Ring Data Bank. IGBP PAGES/World Data Center-A for Paleoclimatology (Data Contribution Series # 90-003). NOAA/NGDC Paleoclimatology Program, Boulder, CO. <ftp://ftp.ngdc.noaa.gov/paleo/treering/>

3.2.5. Software

DendroClim2002 is a user-friendly, interactive software package for the analysis of changes in climate/tree-growth relationships over time. The software runs on Windows 98/ME/2000/XP operating systems and is freely available from the author. About 670 different individuals have downloaded DendroClim2002 from locations in North, Central, and South America, as well as Europe, Asia, and Australia.

DendroNet GIS (<http://dendrolab.org/GIS>) is an ASP-based interactive GIS service that allows online users to geographically browse the Great Basin region, create their own custom maps, and query various data layers such as tree species locations, county and watershed boundaries, and climate data. We designed a custom ActiveX connector that does not require a client to be installed by the user, provides multithreaded operation, and is much faster than the simple HTML connector provided with ArcIMS. This GIS service is now used to provide time-series climate data by spatial coordinates, i.e. simply by clicking the desired location on our web service map of the Great Basin.

F. Biondi - CURRICULUM

- 27 -

4. PROFESSIONAL PRESENTATIONS

2010 Feb 2 “Ecological Change and Water Resources: Project Highlights and Progress”, Invited Talk, **Annual State NSF-EPSCoR Climate Change Conference**, Las Vegas, Nevada.

2009 Dec 16 “Recent increase in maximum temperature at the tropical treeline of North America”, Accepted Poster, Session on ‘Climate Change and Biogeophysical Impacts Across Elevation and Latitude: Are Mountains Different From Poles?’, **American Geophysical Union Fall Meeting**, San Francisco, California.

2009 Dec 10 “DendroLab Research Activities and NSF EPSCoR Ecological Change Program”. Invited Talk, Visit to Reno by Delegation from Xinjiang Institute of Ecology and Geography, UNR.

2009 Oct 28 “A 2300-year tree-ring chronology and its climatic implications for the eastern Sierra Nevada/western Great Basin”. Accepted Talk, **International Symposium on Terminus Lakes: Preserving Endangered Lakes Through Research**, UNR.

2009 Sep 28 “Daily Trends and Diel Cycles of Ecoclimatic Variables at the Tropical Treeline in the North American Monsoon Region”. Invited Talk, **Environmental Sciences Seminar Series**, UNR.

2009 Jul 27 “Cicli diurni e tendenze generali misurate al limite del bosco nel sistema

monsonico dei tropici nordamericani” (in Italian). Invited Seminar,
Università degli Studi della Tuscia, Viterbo, Italy.

2009 Mar 31 “Nevada EPSCoR Project: Ecological Change Component”. Invited Talk,
Ecology Breakout Session, **First Annual Meeting, EPSCoR Western Tri-
State Consortium**, Boise, Idaho.

2009 Mar 27 “An expanded tree-ring network for eco-hydro-climatic research in the Great
Basin of North America”, Invited Talk, Session on “Climate, Wildfire, and
Woodland Dynamics in the Great Basin of North America – II”, **Annual
Meeting, Association of American Geographers**, Las Vegas, Nevada.

2009 Mar 26 “Climate Change, Ecosystems and Research Agendas in the Lower Colorado
River Basin”, Invited Panel Member, **Annual Meeting, Association of
American Geographers**, Las Vegas, Nevada.

2009 Feb 26 “Great Basin Tree-Ring Records of Hydroclimatic Variability”, Invited Talk,
University of Alabama, Tuscaloosa, Alabama.

2009 Feb 2 “Tree-ring investigations of environmental change in the eastern Sierra

F. Biondi - CURRICULUM

- 28 -

Nevada”, Invited Talk, **Soka University of America**, Aliso Viejo,
California.

2008 Nov 13 “Tree-ring extension of hydrological records for selected eastern Nevada
valleys: Building the dataset”, Invited Talk, **Workshop on Tree-ring
Reconstructions of Streamflow and Climate and their Application to
Colorado River Basin Water Management**, Bureau of Reclamation,
Boulder City, Nevada.

2008 Jul 15 “Tree Ring Research”, Invited Seminar, **Alumni College XIX** with the
theme ‘Environmental Impact’, UNR.

2008 Jun 23 “Is it time to rethink the ‘conservative’ option? An alternative approach to
removing the biological trend”, Accepted Talk, The First American
Dendrochronology Conference, **AmeriDendro 2008**, Vancouver, British
Columbia, Canada.

2008 Apr 16 “Inequality in paleorecords: an interdisciplinary tale”, Accepted Talk,
Session on ‘Advances in Paleoclimatology IV’, **Annual Meeting,
Association of American Geographers**, Boston, Massachusetts.

2008 Apr 11 “Daily trends and diurnal weather cycles at the tropical treeline in the North
American monsoon region”, Invited Talk, **Regional Climate Forum for
Northwest Mexico and the Southwest United States**, CICESE, Ensenada,
Baja California, Mexico.

2008 Jan 16 “Estimating the likelihood of eco-hydro-climatic episodes from tree-ring
records”, Accepted Poster, 8th National Conference on Science, Policy and
the Environment on Climate Change: Science & Solutions, **National Council
for Science and the Environment**, Washington, D.C., USA.

2007 Dec 10 “Diurnal weather cycles at the tropical treeline in the North American
Monsoon region”, Accepted Talk, Session on ‘Climate of the Monsoon:
Proxy Records, Measurements, and Models’, **American Geophysical Union
Fall Meeting**, San Francisco, California.

2007 Nov 28 “Testing the Sierra Nevada Mega-Drought Hypothesis”, Invited Seminar,
University of California-Merced, Merced, California.

2007 Nov 5 “Give climate a chance: Estimates from tree rings”, Accepted Poster, Climate Change Symposium, **Nevada Water Resources Association**, Las Vegas, Nevada.

2007 Oct 19 “Mt. Irish dendroclimatic series”, Invited Talk, Bureau of Land Management and Eastern Nevada Landscape Coalition, Ely, Nevada.

F. Biondi - CURRICULUM

- 29 -

2007 Jul 13 “Modeling episode peak and duration for eco-hydro-climatic applications”, Accepted Talk, **International Union of Geodesy and Geophysics, XXIV General Assembly**, Session HW2003 "Analysis of Variability in Hydrological Data Series", Perugia, Italy.

2007 Jul 13 “A 2300-year hydro-climatic reconstruction for the Walker River Basin, California and Nevada, US”, Accepted Poster, **International Union of Geodesy and Geophysics, XXIV General Assembly**, Session HW2003 "Analysis of Variability in Hydrological Data Series", Perugia, Italy.

2007 Jul 5 “Tree-Ring Records of Past Climate from the Great Basin, USA”, Chair of Forest Ecology, Invited Seminar, Chair of Forest Ecology, **Swiss Federal Institute of Technology (ETH)**, Zurich, Switzerland.

2007 Apr 21 “Spatial and temporal patterns identified in a Pinus monophylla tree-ring network”, Accepted Talk, Session on ‘Dendrochronology’, 103rd **Annual Meeting, Association of American Geographers**, San Francisco, California.

2007 Feb 14 “Using Tree-Ring Science To Investigate Environmental Change: Underwater Dendrochronology In The Sierra Nevada”, Invited Seminar, Stanford Archaeology Center in Association with the Woods Institute for the Environment and the School of Earth Sciences, **Stanford University**, California.

2007 Jan 24 “Underwater dendrochronology in Sierra Nevada lakes”, Invited Talk, **Desert Research Institute**, Division of Atmospheric Sciences, Reno, Nevada.

2006 Dec 11 “Underwater Dendrochronology of the Sierra Nevada: Testing the Medieval Mega-Drought Hypothesis”, Invited Talk, **American Geophysical Union Fall Meeting**, San Francisco, CA.

2006 Oct 19 “Underwater Dendrochronology of Sierra Nevada Lakes”, Accepted Poster, **Science as a Tool in Lake Tahoe Basin Management**, Tahoe Center for Environmental Science, Sierra Nevada College, Incline Village, NV.

2006 Sep 20 “¹⁴C Analysis Confirms the Annual Nature of Sagebrush Wood Layers”, Accepted Poster, **MTNCLIM Conference**, Consortium for Integrated Climate Research in Western Mountains, Mt. Hood, Oregon.

2006 Jun 15 “Give the 20th century a chance: Using tree-ring records and stochastic models for resource management”, Invited Talk, **7th International Conference on Dendrochronology**, Chinese Academy of Sciences, Beijing, China.

F. Biondi - CURRICULUM

- 30 -

2006 Apr 18 “Give the 20th century a chance: Using a 2300-year Long Reconstruction of Dry/Wet Episodes to Place Modern Climate in Perspective”, Invited Talk,

American Meteorological Society, Northern Nevada Chapter, Reno.
 2006 Mar 8 “Pyroclimatic Hypothesis for Mt. Irish, Nevada, Derived from Tree-Ring Records”, Accepted Poster, **102nd Annual Meeting, Association of American Geographers**, Chicago, IL
 2006 Jan 17 “Tree Rings as Natural Archives of Environmental Change”. Invited Seminar, Department of Geological and Environmental Sciences, **Stanford University**, CA.
 2005 Sep 29 “Environmental Signals in Tree Rings”. Invited Keynote Talk, Special Plenary Session of the **EuroDendro 2005 International Conference of Dendrochronology**, Università della Tuscia, Viterbo, Italy.
 2005 Jul 18 “Data and Models”. Invited Talk, **Workshop on Interdisciplinary Modeling for Aquatic Ecosystems**, Tahoe City, California.
 2005 May 1 “Pyroclimatic Hypothesis for Mt. Irish, Nevada, Derived from Tree-Ring Records”. Invited Talk, **Workshop on Fire History and Climate Synthesis in Western North America**, Northern Arizona University, Flagstaff, AZ.
 2005 Apr 7 “A Pinus monophylla Tree-ring Network for Hydroclimatic Studies in the Great Basin of North America”. Accepted Talk, **101st Annual Meeting, Association of American Geographers**, Session on ‘Dendroclimatology’, Denver, CO.
 2005 Mar 2 “Great Basin Tree-Ring Records from Lower-Forest-Border Sites”. Accepted Poster, **MTNCLIM Science Symposium**, Chico Hot Springs, Montana.
 2005 Feb 15 “Tree-ring Records of Past Drought in the Great Basin”, Invited Talk, **American Meteorological Society**, Northern Nevada Chapter, Reno, NV.
 2005 Jan 20 “Pre-settlement Wildfire and Drought in Piñon-Juniper Woodlands of S-E Nevada”. Invited Talk, Resource Advisory Council Meeting, **Bureau of Land Management**, Red Rock Canyon Visitor Center, Las Vegas, Nevada.
 2004 Dec 14 “Great Basin Dendrochronology”. Invited Talk, 3rd International Winter School on Wood Anatomy of Tree Rings, Davos Laret, **Switzerland**.
 2004 Sep 20 “Tropical Treeline and North American Monsoon Climate on Nevado de Colima, Mexico”. Invited Talk, Graduate Program of Hydrologic Sciences Colloquium, **UNR**.
F. Biondi - CURRICULUM
 - 31 -
 2004 Jul 13 “Dendroclimatologia e Dendroidrologia: Nuovi Sviluppi Teorici ed Applicazioni Preliminari al Bacino del Walker River, California e Nevada, USA”. Invited Seminar, Corso di Dottorato in Scienze e Tecnologie per la Gestione Forestale e Ambientale, **Università degli Studi della Tuscia**, Viterbo, Italy.
 2004 Mar 25 “A 2300-year Hydroclimatic Reconstruction for the Eastern Sierra Nevada, USA”. Invited Talk, College of Agriculture, Biotechnology and Natural Resources, **UNR**.
 2004 Mar 25 “Using R for Principal Component Analysis”. Invited Talk, R Users Group, **UNR**.
 2003 Nov 25 “Developing Predictive Models for the Distribution of Old-growth Pinyon-Juniper Woodland”. Invited Talk, College of Agriculture, Biotechnology and Natural Resources, **UNR**.
 2003 Jul 16 “Reti dendroecologiche e ricostruzioni climatiche”. Invited Seminar, Corso

di Dottorato in Scienze e Tecnologie per la Gestione Forestale e Ambientale,
Università degli Studi della Tuscia, Viterbo, Italy.

2003 Jul 8 “Analisi dendrocronologica dell’ambiente: esempi di applicazione”. Invited Talk, **Istituto Agrario di San Michele All’Adige**, Trento, Italy.

2003 Apr 17 “Decadal climate and forest dynamics from tree-ring chronologies”. Invited Talk, Disturbance, Disaster, and Cataclysm Seminar Series, Geosciences Department, **Oregon State University**, Corvallis.

2002 Nov 18 “A simple approach to modeling regime shifts over time, plus new software tools for dendroclimatic analysis”. Invited Talk, Laboratory of Tree-Ring Research, **University of Arizona**, Tucson.

2002 Mar 25 “Decadal climate from tree-ring chronologies”. Invited Talk, Fire and Climate History in Western North and South America Workshop, **University of Arizona**, Tucson.

2002 Mar 21 “Decadal climate variability from Southern California tree-ring records”. **2001 Paper of the Year Speaker**, Climate Specialty Group Climate Day, 98th Annual Meeting of the Association of American Geographers, Los Angeles.

2002 Feb 6 “Tree-Ring Analysis”. Invited Talk, Paleoclimatology and Paleoceanography Seminar, Department of Geological and Environmental Sciences, **Stanford University**, California.

F. Biondi - CURRICULUM

- 32 -

2001 Apr 6 “Decadal climate surprises”. Invited Talk, Institute of Forest Genetics Winter 2001 Seminars on Climate Change and Western North American Ecosystems, **University of California, Davis**.

2001 Mar 29 “Decadal climate change and tree rings”. Invited Talk, Laboratory of Tree-Ring Research, **University of Arizona**, Tucson.

2001 Feb 7 “Tree ring analysis”. Invited Talk, Seminar on Historical Data in Ecology and Resource Management, Program in Ecology, Evolution and Conservation Biology, **UNR**.

2001 Jan 12 “Tropical dendrochronology: A progress report from the treeline of North America”. Invited Talk, Friday Brown Bag Seminar Series, **Desert Research Institute**, Reno.

2000 Oct 19 “High elevation tree rings and climate in the North American Tropics”. Invited Talk, Fall 2000 Colloquium, Program in Ecology, Evolution and Conservation Biology, **UNR**.

2000 Mar 14 “North Pacific decadal climate variability since AD 1661”. Invited Talk, Department of Geography, **UNR**.

1999 Jan 19 “Tree ring research at the Scripps Institute”. Invited Talk, Physical Geography Discussion Group, **University of Edinburgh**, Scotland, U.K.

1998 Feb 27 “Detecting climate change from plant growth indices: NDVI and tree-ring data”. Invited Talk, Marine Geology and Geophysics Seminar, **Scripps Institution of Oceanography**, La Jolla.

1997 Mar 19 “Tree rings and varves: Southern California climate connection”. Invited Talk, Ecology Seminar, **Scripps Institution of Oceanography**, La Jolla.

1996 Feb 22 “Life and death in a southwestern ponderosa pine forest”. Invited Talk, Department of Geography, **University of New Mexico**, Albuquerque.

1995 Mar 31 “Spatial and temporal reconstruction of 20th century growth trends in a natural pine forest”. Invited Talk, Centro de Investigación Científica y de Educación Superior de Ensenada (**C.I.C.E.S.E.**), Baja California (Mexico).

1994 May 4 “Reconstructing spatio-temporal growth trends in a ponderosa pine forest”. Dissertation Defense, Laboratory of Tree-Ring Research, **University of Arizona**, Tucson.

1993 Oct 8 “Spatio-temporal trends in a natural pine stand”. Invited Talk, Department of Ecology, Evolution, and Behavior, **University of Minnesota**, St. Paul.

F. Biondi - CURRICULUM

- 33 -

1993 May 5 “Geostatistically monitoring stem size and growth”. Invited Talk, Laboratory of Tree-Ring Research, **University of Arizona**, Tucson.

1992 May 6 “Climatic signals in tree rings of *Fagus sylvatica* from central Italy”. Invited Talk, Laboratory of Tree-Ring Research, **University of Arizona**, Tucson.

1989 Jan 24 “Dendroecologia e indici di competizione tra alberi”. Invited Talk, Istituto Biologico Selvicolturale, **Università degli Studi della Tuscia**, Viterbo, Italy.

1988 Dec 16 “Tree rings in Italy: a first report”. Invited Talk, Laboratory of Tree-Ring Research, **University of Arizona**, Tucson.

1988 Jun 3 “La dendrocronologia come strumento di analisi ambientale”. Invited Talk, **Centro di Ricerca Termica e Nucleare** (CRTN) dell’ENEL, Milano, Italy.

1988 Jan 20 “Pine-oak interactions and tree rings”. Invited Talk, Laboratory of Tree-Ring Research, **University of Arizona**, Tucson.

1987 Apr 30 “Gambel oak influence on ponderosa pine growth”. Thesis Defense, Laboratory of Tree-Ring Research, **University of Arizona**, Tucson.

F. Biondi - CURRICULUM

- 34 -

5. GRANTS AND AWARDS

5.1. Research Grants

5.1.1. Current Projects

Nevada Infrastructure for Climate Change Science, Education, and Outreach; National Science Foundation, EPSCoR Research Infrastructure Improvement Grant Program, 2008-2013, \$655,722 out of \$15,000,000 (UNR Co-PI for the Nevada Competition, and Ecological Change Lead for the NSF Proposal).

Multi-Century Streamflow Derived From Watershed Modeling and Tree-Ring Data; Paleo Perspectives on Climate Change (P2C2) Program, National Science Foundation; **P.I.**, 2008-2011, \$181,744 out of \$291,801.

Tree-Ring Extension of Hydrological Records for Selected Eastern Nevada Valleys; Southern Nevada Water Authority; 2008-2010, \$173,600 (sole **P.I.**).

Special Project EPSCoR 2: Ecological Change, NSHE-CO for NSF-EPSCoR Research Infrastructure Improvement Grant Program, 2009-2010, \$6500 (sole **P.I.**).

Special Project EPSCoR: Ecological Change, NSHE-CO for NSF-EPSCoR Research Infrastructure

Improvement Grant Program, 2008-2010, \$49,126 (sole **P.I.**).

5.1.2. Completed Projects

Pre-settlement Wildfire, Drought, and Piñon Juniper Dynamics in Southeastern Nevada; Department of the Interior, Bureau of Land Management (through the Great Basin Cooperative Ecosystem Study Unit); **P.I.**, 2007-2009, \$805,589 out of \$1,357,370.

Stochastic Modeling of Episode Duration, Magnitude, and Peak in Long Paleo Records; Paleoclimate Program, Division of Atmospheric Sciences, National Science Foundation; **P.I.**, 2005-2009, \$94,045 out of \$241,226.

Tracing the Waters Through the Trees: North American Monsoon Dynamics During the Past Four

Centuries; Geography and Regional Science Program, Division of Behavioral and Cognitive Sciences, National Science Foundation; 2005-2009, \$225,000 (sole **P.I.**).

Research Experiences for Undergraduates, Geography and Regional Science Program, National Science Foundation; 2006-2009, \$12,000 (sole **P.I.**).

CAREER: Learning in the Woods - Decadal Climate, Water Supply, and Fire Frequency in the Great Basin; Paleoclimate Program, Division of Atmospheric Sciences, National Science

F. Biondi - CURRICULUM

- 35 -

Foundation; 2002-2008, \$400,197 (sole **P.I.**)^s.

Research Experiences for Undergraduates, Paleoclimate Program, National Science Foundation; 2003-2008, \$8,800 (sole **P.I.**).

Dendrochronological dating of charcoal ovens, Summit Envirosolutions; **P.I.**, 2007-2008, \$3000.

Tree-Ring Analysis of Single-leaf Pinyon (Pinus monophylla) at Joshua Tree National Park, California, Joshua Tree National Park, National Park Service, **P.I.**, 2008, \$2500.

US Conference Travel Support, College of Science Dean's Office, UNR; 2008, \$300.

Tree-Ring Analysis of Environmental Change; UNR; **Sabbatical Leave**; 2006-2007.

Blaustein Visiting Professorship, School of Earth Sciences, Stanford University, California; 2007,

\$16,000 (sole **P.I.**).

ETH Visiting Professorship, Institute of Terrestrial Ecosystems, Zurich, Switzerland; 2007, \$8,000

(sole **P.I.**).

International Travel Support, Office of the Vice President for Research, UNR; 2006, \$750.

US Conference Travel Support, College of Science Dean's Office, UNR; 2006, \$300.

Radiocarbon Dating of Sagebrush for Fire History Research; Research Initiatives Program, Woods

Hole Oceanographic Institute; 2005-2006, \$5,000 (sole **P.I.**).

Did Settlement-Era Livestock Grazing Facilitate Pinyon-Juniper Expansion by Altering Fire Regimes?; Bureau of Land Management (through the Great Basin Cooperative Ecosystem Study Unit); Co-P.I., 2003-2006, \$3,000 out of \$50,000.

Tree-Ring Dating of Truckee Charcoal Ovens; Archaeologist Susan Lindström; 2003-2005, \$8,200

(sole **P.I.**).

Assessment of Present, Past, and Future Climate Variability in the Americas from Treeline Environments; Inter-American Institute for Global Change Research (IAI); Co-P.I., 1999-2005, \$5,000 out of \$820,000.

Tree-ring Dating of Eureka Charcoal Ovens; Summit Envirosolutions; **P.I.**, 2003-2004, \$1,500.

Development of a Methodology for Building Long-term Fire History in Great Basin Valley

^s A Graduate Research Assistantship was provided by UNR's Office of the Vice President for Research for the first three

years of the grant.

F. Biondi - CURRICULUM

- 36 -

Landscapes; Bureau of Land Management (through the Great Basin Cooperative Ecosystem Study Unit); Co-P.I., 2002-2003, \$22,244 out of \$99,321.

High Elevation Tree Rings and Climate in the North American Tropics; Paleoclimate Program, Division of Atmospheric Sciences, National Science Foundation; **P.I.**, 2000-2003, \$295,872.

Establishing a Laboratory for High-resolution Paleoclimatology; Interdisciplinary Science of Nevada's Unique Environments Program, Experimental Program to Stimulate Competitive Research, National Science Foundation; 2001-2002, \$61,000 (sole **P.I.**).

Tree-Ring Reconstruction of Climate Variability at the Tropical Boundary of the American West; Paleoclimate Program, Office of Global Programs, National Oceanic and Atmospheric Administration; **P.I.**, 2000-2002, \$60,500.

The Last Four Centuries of the California Current: Calibration and Interpretation from Laminated

Sediments, Tree-rings, and Historical Records of Southern Alta California and Baja California; Inter-American Institute for Global Change Research; Co-P.I., 1997-1999; \$20,000 out of \$90,500.

Multi-Proxy Reconstruction of Climate Variability in Jalisco, Mexico; National Geographic Society; 1997-1999, \$22,760 (sole **P.I.**).

California Current Sensitivity To Pacific Climate: Interdecadal Changes Reconstructed From Tree

Rings and Varves; National Science Foundation, Earth System History Program; 1995-1998 (Associate P.I. with W. Berger and D. Cayan).

Drought History of Baja California Reconstructed from Tree-Ring Chronologies; University of California, Mexico-US Program for Collaborative Research in the Natural Sciences; 1995-1996 (Associate P.I. with W. Berger).

Historical Flow Regimes and Riparian Vegetation Dynamics at Walnut Canyon National Monument, Arizona; Northern Arizona University; 1992-1993, \$2,000 (Subcontractor).

Long-term Dynamics of Aboveground Carbon Storage in a Southwestern Ponderosa Pine Ecosystem; Summer Research Support Program and Graduate Student Research Fund, Graduate College, University of Arizona; 1991-1992, \$800 (sole **P.I.**).

Tree-ring Chronologies for the Italian Peninsula; Publication Grant, The Dr. M. Aylwin Cotton Foundation, Channel Islands, U.K.; 1990, \$1,500 (sole **P.I.**).

5.2. Teaching Grants

Visualization of transect data; Undergraduate Research Opportunities, Nevada NSF EPSCoR; 2009-2010, \$4,300 (Co-Mentor for Joel Larsen).

F. Biondi - CURRICULUM

- 37 -

Daily Cycles of Leaf Water Stable Isotopes in Two Pine Species; Whittell Forest Graduate Fellowship, UNR; 2006, \$4,700 (Mentor for Robert Monnar).

A Data-Mining Approach for Predicting Drought Levels; Graduate Research Opportunities in Advanced Computing and Visualization in Environmental Sciences, Nevada NSF EPSCoR RING-TRUE II Task 26; 2005-2006, \$9,700 (Mentor for Anil Shankar).

Acquiring GS+ Software; UNR Technology Committee; 2005; \$500.

Teaching Assistantship, Hydrologic Sciences Graduate Program, UNR; 2003-2004, \$400.

Information Technology for Teaching Geographic Information Systems, Cartography, and Image

Analysis in Geography, Technology Fee Distribution Program, UNR; 2003-2004, \$32,255.
Acquiring Specialized Software, Faculty Senate Software Purchasing Program, UNR; 2003, \$800.

Information Technology for Teaching Geographic Information Systems, Cartography, and Image Analysis in Geography, Technology Fee Distribution Program, UNR; 2002-2003, \$26,233.

Rural Landscapes of Northern Italy, University Studies Abroad Consortium, UNR; Summer 2002, \$2,800.

Acquiring X-Server Software, Faculty Senate Software Purchasing Program, UNR; 2002, \$700.

Acquiring "Field Methods" Tools; Instructional Enhancement Grant, Excellence in Teaching Program, UNR; 2001-2002, \$4,000.

Information Technology for Teaching Geographic Information Systems, Cartography, and Image Analysis in Geography, Student Technology Fee Distribution Program, UNR; Co-P.I., 2001-2002, \$25,000.

Acquiring Tools for Spatial Analysis; Instructional Enhancement Grant, Excellence in Teaching Program, UNR; 2000-2001, \$1,900.

Analysis of Winter Storm Factors and Avalanche Response, Mammoth Mountain, California; Undergraduate Scholarly Research and Creative Project Program, UNR; 2000-2001, \$1,000 (Mentor for Susan Burak).

5.3. Academic Awards and Honors

June 2008: **Senior Ecologist**, Ecological Society of America (ESA) Board of Certification.

F. Biondi - CURRICULUM

- 38 -

May 2008: **Hyung K. Shin Award for Excellence in Research**, College of Science, UNR.

April 2008: **Outstanding Researcher Award**, Mackay School of Earth Sciences and Engineering, UNR.

December 2007: **Foreign Member**, PhD Program in Science and Technology for Forest and Environmental Management, University of Tuscia, Viterbo, Italy.

Feb 2006: **Invited Member**, Committee on "Surface Temperature Reconstructions for the Past 1,000-2,000 Years: Synthesis of Current Understanding and Challenges for the Future", Board on Atmospheric Sciences and Climate, Division of Earth and Life Studies, **National Academy of Sciences**.

Apr 2001: **Teacher Recognition Award**, Delta Delta Delta, UNR.

Mar 2001: **Paper of the Year Award**, Climate Specialty Group of the Association of American Geographers (for the article "North Pacific decadal climate variability since AD 1661").

Sep 1998: Fellowship to attend the "Second GKSS School on Environmental Research", Lauenburg, Germany.

May 1998: Travel Fellowship to attend the "7th International Meeting on Statistical Climatology",

Whistler, British Columbia, Canada.

Jul - Aug 1997: Participant in the NCAR Summer Colloquium on "A Systems Approach to El Nino

Southern Oscillation", National Center for Atmospheric Research, Boulder, Colorado.

Sep - Dec 1993: Travel Fellowship, Research Training Group (RTG) in "Paleorecords of Global Change", University of Minnesota.

Dec 1992: McGinnies Graduate Scholarship in Arid Lands Studies, University of Arizona.
Aug - Dec 1992: Graduate Tuition Scholarship, Graduate College, University of Arizona.
Nov 1992: Andrew E. Douglass Scholarship, Laboratory of Tree-Ring Research, University of Arizona.

Apr 1992: NOAA Fellowship to attend the First Colloquium on “Operational Environmental Prediction”, Jun 1-27, NOAA Science Center, Camp Springs, Maryland.

Aug 1989: Scholarship for Research Abroad, National Council for Research, Italy.

Sep 1988: Fellowship, Aylwin Cotton Foundation, The Channel Islands, U.K.

F. Biondi - CURRICULUM

- 39 -

Aug 1985 - May 1987: Fulbright Travel Grant and Fulbright Cultural Enrichment Travel Grant, Institute

of International Education, USA. Supplementary Fellowship, M. Vinciguerra Fund.

F. Biondi - CURRICULUM

- 40 -

6. COLLEGE TEACHING

6.1. Courses Taught

6.1.1. Classes at UNR

2001, '02, '03, '04, '05, '08, '09 Physical Geography (GEOG 103, 3 credits)⁶

2008 Climate Change and its Environmental Impacts (GEOG /
ATMS 121, 4 credits) ⁶

2001, '02, '04 Field Methods (GEOG 314, 3 credits)

2006, '09 Understanding Climate (GEOG 321, 3 credits) ⁶

2001, '03, '05, '09, '10 Spatial Analysis (GEOG 416/616, 3 credits) ⁵

2000, '02, '04 Climatology (GEOG 421/621, 3 credits) ⁵

2002, '10 Geography of Past Environments (GEOG 437/637, 3 credits) ⁷

2001, '02, '03, '04, '06, '08, '09 Special Topics (GEOG 491/691, 1-3 credits)

2005 Advanced Geography – Climatology (GEOG 701R, 3 credits)

2001, '03, '08 Advanced Climatology (GEOG 721, 3 credits) ⁵

2002 Rural Landscapes of Northern Italy (USAC; GEOG 300, 1
credit) ⁶

2003 Research Rotation II (EECB 702, 3 credits)

6.1.2. Classes outside UNR

1999, 2000 Ecology and the Environment (BIOL 354), Biology Department, San Diego State University, San Diego, CA. ⁵

1997 Introduction to Oceanography (PHS 110), Math/Science/Engineering Division, Southwestern College, San Diego County, CA. ⁶

1991, '02 Intermediate Italian Language (ITAL 102) and Advanced Italian Language (ITAL 202), Department of French and Italian, University of Arizona, Tucson.

1989, '90 Ecologia Vegetale Agraria (Agricultural Plant Ecology, in Italian), School of Agriculture, Catholic University of Milan, Italy. ⁵

6.1.3. Outreach Seminars Aimed at Groups Underrepresented in Science

2002, '03, '04 *Learning in the Woods*, Science Experience for Nevada K-12 teachers and Latino/a students funded by a CAREER grant from the Paleoclimate Program in the Division of Atmospheric Sciences at the National Science Foundation.

6.2. Advising

Graduate Committee Chair:

K. Hoover (M.S., Geography, 2008-present)
M. Bradley (M.S., Hydrologic Sciences, 2007-'09)
J. Cheek (M.S., Geography, 2007-'09)

⁶Modified course

⁷New course

F. Biondi - CURRICULUM

- 41 -

M. Kilpatrick (M.S., Geography, 2007-'09)
K. Solander (M.S., Hydrologic Sciences, 2007-'09)
L. Jamieson (M.S., Geography, 2005-'08)
K. Mann (M.S., Geography, 2008)
R. Roque (M.S., Hydrologic Sciences, 2007-'08)
R. Monnar (M.S., Geography, 2005-'07)
P. Kirchner (M.S., Geography, 2003-'05)
H. Kemp (M.S., Geography, 2002-'04)
R. Van Lieshout (M.S., Geography, 2000-'01)
P.C. Hartsough (Ph.D., Hydrogeology, 2001-'08).

Graduate Committee Member:

J. Vittori (M.S., Environmental Sciences, 2009-present)
F. Qeadan (M.S., Mathematics and Statistics, 2006-'08)
T.E. Dilts (M.S., Geography, 2005-'07)
J.M. Bauer (M.S., Natural Resources and Environmental Sciences, 2004-'06)
S.E. Draucker (M.S., Geology, 2004-'06)
M.J. Demmon (M.S., Geography, 2002-'05)
F. Amankonah (M.S., Mathematics and Statistics, 2003-'05)
K.K. Milford (M.S., Mathematics and Statistics, 2003-'05)
D. Rominger (M.S., Mathematics and Statistics, 2003-'05)
M. Arrigotti (M.S., Mathematics and Statistics, 2003-'04)
E. Kapiloff (M.S., Mathematics and Statistics, 2003-'04).
M. Morrison (M.S., Geography, 2002-'04)
N.P. Adhikari (M.S., Atmospheric Sciences, 2001-'03)
C.R. Mohrle (M.S., Atmospheric Sciences, 2001-'03)
H.J. Reinbold (M.S., Atmospheric Sciences, 2001-'03)
R.A. Patil (M.S., Computer Science, 2001-'03)
K.K. Waikul (M.S., Computer Science, 2001-'03)
D.R. Courtois (M.S., Environmental Resource Sciences, 2001-'03)

Supervisor:

Dr. X. Wang (Visiting Scholar; 2009-present)
D. Connell (Computer programmer; 2009-present)
M. Koch (Undergraduate laboratory assistant; 2008-present)
S. Strachan (Research Technician; 2002-present)
H. Kulkarni (Computer programmer; 2009)
Dr. J. Koracin (Administrative Faculty; 2008-'09)
A. Mensing (Research Technician; 2008)
Dr. J. Sibold (Postdoctoral Fellow; 2007-'08)
K. Rock (Research Technician; 2006-'08)

Dr. A. Di Filippo (Visiting Scholar; 2005)
A. Shankar (Summer Graduate Fellow; 2005)

F. Biondi - CURRICULUM

- 42 -

International Dissertation Discussant:

E. Ziaco (Ph.D., Science and Technology for Forest and Environmental Management, University of Tuscia, Viterbo, Italy, 2009)

M.M. Fauria (Ph.D., Department of Geology, University of Helsinki, Finland, 2008)

Undergraduate Advisor to more than 20 Geography majors.

Mentor for an Honors' undergraduate class project (Irene Seelye, GEOG 321).

F. Biondi - CURRICULUM

- 43 -

7. SERVICE

7.1. Service to UNR

7.1.1. Department of Geography

Director of the Tree-Ring Laboratory (DendroLab), 2000-present

Chair of Search Committee for Ecoclimatologist/Assistant Professor position, 2009.

Member of Search Committee for Paleoclimate Modeler/Assistant Professor position, 2009.

Director of Graduate Studies, 2002-'06

Member of Personnel Committee, 2006

Chair of Search Committee for DendroLab Postdoctoral Fellow position, 2006 and 2008

Chair of Search Committee for Nevada State Climatologist/Assistant Professor position, 2003-'04

Member of Selection Committee for an Assistant Visiting Professor position, 2003

7.1.2. College of Science

Member of Shin Research Award Committee, 2009.

Member of the Courses and Curriculum Committee, 2005-'06 and 2007-present.

External Participant to Department of Mathematics and Statistics Program Review, 2006.

7.1.3. University

Faculty Member, Interdisciplinary Graduate Program of Environmental Sciences, 2008-present

Member, Subcommittee on Mathematics and Natural Sciences Core Curriculum, 2003-'06 and 2008-

present

Faculty Member, Graduate Program of Atmospheric Sciences, 2007-present

Faculty Member, PhD Program in Ecology, Evolution, and Conservation Biology, 2005-present

Member, Network of Faculty for Undergraduate Research (NFUR), 2005-present

Faculty Member, Graduate Program of Hydrologic Sciences, 2000-present

Member, Environmental Studies Major Steering Committee, 2005-'06

Core Faculty Member, Raggio Center for STEM (Science, Technology, Engineering, and Mathematics) Education, 2003-'06.

Member, Ad Hoc Task Force to Improve Administrative Services for Researchers, 2003-'05

7.2. Service to the Profession

Organizer of two Special Sessions on "Climate, Wildfire, and Woodland Dynamics in the Great Basin of North America" at the *2009 Annual Meeting of the Association of American Geographers*, Las Vegas, Nevada, USA.

Member of Proposal Review Panel for the *Paleo Perspectives on Climate Change Program*, National Science Foundation, 2009.

Member of Selection Committee for the Paper of the Year Award, Climate Specialty Group,
F. Biondi - CURRICULUM

- 44 -

Association of American Geographers, 2002-'06 and 2007-present.

Co-leader of MTNCLIM Working Group on *Paleoclimatology and Water Resources Management*:

Time for an Integrated Paleo-Resource?, 2005-'08.

Member of National Academy of Sciences Committee on *Surface Temperature Reconstructions for the Past 2,000 Year*, 2006.

Member of Proposal Review Panel for the *Sedimentary Geology and Paleobiology* Program, National Science Foundation, Directorate for Geosciences, Division of Earth Sciences, 2006.

Member of Proposal Review Panel for the *Earth System History* Program, National Science Foundation, Directorate for Geosciences, 2006.

Member of Proposal Review Panel for the Austrian Science Fund to evaluate the multi-national project *HiMAT: The History of Mining Activities in the Tyrol*, 2006.

Member of the Scientific Board, *Eurodendro 2005 International Conference of Dendrochronology*,

Sep 20-Oct 2, 2005, Viterbo, Italy.

Member of Advisory Board, *Dendrochronologia* (a peer-reviewed, international scientific journal),

1999-2005

Organizer of two Special Sessions on “Paleorecords of Changing Climate Variability” at the *98th Annual Meeting of the Association of American Geographers*, March 19-23, 2002, Los Angeles, California, USA.

Member of the Committee on Biometeorology and Aerobiology, American Meteorological Society,

1997-2000

Member of the Organizing Committee for the International Conference on *Tree Rings, Environment,*

and Humanity: Relationships and Processes, May 17-21, 1994, Tucson, Arizona, USA.

Member of the following professional societies:

American Geophysical Union; American Meteorological Society; Association of American Geographers; Association for Environmental Studies and Sciences; Ecological Society of America; Gamma Sigma Delta (The Honor Society of Agriculture); International Association for Landscape Ecology; International Association of Wood Anatomists; Sigma Xi; Tree-Ring Society.

Outside Peer Reviewer of grant proposals submitted to the following agencies:

National Science Foundation (Civilian Research and Development Foundation Cooperative Grants Program; Earth System History Program; Ecosystem Studies Program;

Geography and Regional Science Program; Instrumentation and Facilities Program;

International Research Fellows Program; Marine Geology and Geophysics Program;

Organism-Environment Interactions Program; Paleoclimate Program; Partnerships

for International Research and Education; Petrology and Geochemistry Program;

Sedimentary Geology and Paleobiology Program)

National Oceanic and Atmospheric Administration (Climate and Global Change Program; Climate Change Data and Detection Program)

United States Department of Agriculture (National Research Initiative Competitive Grants Program)

United States Geological Survey (National Institutes for Water Resource National Competitive Grants Program)

Seventh Research Framework Programme, European Commission

Austrian Science Fund

F. Biondi - CURRICULUM

- 45 -

International Arid Lands Consortium

International Foundation for Science, Sweden

Swiss National Science Foundation

Swiss State Secretariat for Education and Research

Outside Peer Reviewer of manuscripts submitted to refereed books, proceedings, and to the following journals:

American Midland Naturalist Arctic, Antarctic, and Alpine Research

Australian Journal of Botany Bulletin of the American Meteorological Society

Canadian Journal of Fisheries and Aquatic Sciences

Canadian Journal of Forest Research Climate Dynamics

Climate Research Climatic Change

Dendrochronologia Earth, Planets and Space

Ecological Applications Ecological Modelling

Ecological Monographs Ecology

Ecoscience Environmental Management

Forest Ecology and Management Geology

Geophysical Research Letters Global Change Biology

International Journal of Climatology Journal of Applied Geography

Journal of Biogeography Journal of Climate

Journal of Coastal Research Journal of Ecology

Journal of Geophysical Research-Atmospheres

Journal of Geophysical Research-Oceans Journal of Glaciology

Journal of the American Water Resources Association

Journal of Vegetation Science Natural Hazards and Earth System Science

Oecologia Paleogeography, Paleoclimatology, Paleoecology

Plant Ecology Proceedings of the National Academy of Sciences

Quaternary International Quaternary Research

Radiocarbon Restoration Ecology

Scandinavian Journal of Forest Research The Holocene

The Professional Geographer Theoretical and Applied Climatology

Tree Physiology Tree-Ring Research

Trees - Structure and Function Water Resources Research