Thomas F. Braziunas

Distance Learning Program
North Seattle Community College
Seattle, Washington 98103

Home address: 1731 14th Avenue
Seattle, Washington 98122
Email: tbraziun@sccd.ctc.edu
College website: www.virtualcollege.org

Telephones: Office (206) 527-3619
Home (206) 323-5319
Fax (206) 985-3984

Academic Background

B.A., 1973, Geophysical Sciences, University of Chicago
M.S., 1975, Paleontology, State University of New York at Stony Brook
------, 1976, Secondary School Teacher Program, State University of New York at Stony Brook
Ph.D., 1990, Geological Sciences, University of Washington

Professional Experience

Distance Learning Director -- North Seattle Community College (NSCC) 1997 - present
Responsibilities / Accomplishments:

- ***Faculty Training & Support:*** Develop online tutorials and facilitate faculty workshops and individual collaboration on best pedagogical practices in distance teaching and in the design, management, and delivery of high-quality, interactive, effective technology-assisted learning.
- ***Student Support:*** Support students toward the successful completion of distance learning, hybrid learning and web-enhanced curriculum (through creation of online resources for online learners and individual logistical and technological assistance as needed via telephone, email, website, and/or in-person).
- ***Logistical/Technical Support for Online Courses:*** Provide training in educational technologies such as FrontPage, WebCT, Blackboard, Dreamweaver, Camtasia, Impatica, Photoshop, Acrobat, Producer, Premiere and Movie Maker, amongst others.
- ***Development and Logistical Support for Interactive Television (ITV) Courses:*** Coordinate with media, instructional and administrative staff to implement interactive communications (ITV) technology for classes shared at several campuses.
- ***Assessment of Student Success:*** Administer, compile and assess statistics on student demographics and online course surveys to assure quality and effectiveness of offerings.
- ***Team Effort toward College Success:*** Maintain steady growth in distance and hybrid learning enrollments; prepare distance learning documentation to supplement NSCC accreditation.
- ***Website Design:*** Design the Virtual College (www.virtualcollege.org) website to promote curriculum, provide online resources for students and faculty, and convey accurate course schedule / description information.
- ***State Collaborations:*** Distance Learning Council of Washington State (member and chair); College Council; Curriculum & Academic Standards (CAS) Distance Learning Task Force (co-chair); Strategic Planning Committee; College Technology Committee; Teaching & Learning Center Professional Development Advisory Board; formed DOES-IT (Dialogue on E-learning Successes, Issues & Technologies) Group to advise the Distance Learning program.

Geology Instructor -- South Seattle and North Seattle Community Colleges 1994 - 1998

Responsibilities / Accomplishments (Load: 2-4 courses/quarter):

- Instruction of Physical Geology, Historical Geology, Dinosaurs, Geography, Oceanography.
- Design and instruction of Seattle District's first online laboratory science course (GEOL 101).
- Development and execution of weekend field trips to Mt. St. Helens, Mt. Rainier; Eastern Washington; Sucia and Orcas Islands, San Juan Islands; Olympic Mountains; Dungeness Spit; Mt. Erie, Whidbey Island; Seattle Aquarium; Burke Museum; and Univ. Wash. Geology Dept.
- Collaboration with E.S.L. (English as Second Language) program to advise and instruct groups of E.S.L. students in specific science courses.
- Collaboration with College Success Services on design and instruction of science courses for physically handicapped students (e.g., blind or deaf).
- Curated and updated college's collection of rocks, minerals, and fossils.

Research Assistant Professor -- University of Washington, Geological Sciences 1993 - 1998

Responsibilities / Accomplishments:

- Laboratory analysis of $^{18}O/^{16}O$ samples from Greenland (GISP2) ice core.
- Spectral analysis/causal interpretation of high-resolution climatic (ice core, tree-ring) series.
- Global isotopic carbon cycle modeling related to glacial/interglacial climatic transitions.
- Ice core sampling at the National Ice Core Laboratory, Denver, CO.
- Investigation of atmospheric production of carbon-14, solar variability and climate.
- Modeled latitudinal variations in atmospheric carbon-14 related to ocean CO_2 sources / sinks.
- Calibration of carbon-14 ages of marine and terrestrial samples back to 30,000 years B.P.

Lecturer in Global Environmental Change Workshops -- University of Washington, Sea Grant and SET (Science Enhancements for Teachers) Programs 1992-1994

Responsibilities / Accomplishments:

- Presentation of current information and interpretation of scientific research for K-12 teachers.
- Topics included: global environmental issues, atmospheric CO_2, the carbon cycle, dinosaur biology, asteroid impacts on Jupiter and techniques of carbon-14 dating

Post-doctoral Research Fellow -- Joint Institute for Study of the Atmosphere and Ocean, Department of Atmospheric Sciences, University of Washington 1990 - 1993

Responsibilities / Accomplishments:

- Computer modeling of solar variability and oceanic & atmospheric circulation
- Interpretation of chemical variations in the atmosphere as indicators of past climate.
- Solar, geomagnetic, and oceanic signals in annual to millennial variations of isotopic CO_2.
- Transient isotopic carbon modeling for abrupt (Younger Dryas type) & gradual climate change.

Reviewer For:

- Climate Dynamics, Journal of Archaeological Science, Journal of Geophysical Research, Journal of Interdisciplinary History, Nature, Quaternary Research, Radiocarbon, Science and Tellus.

Other Activities & Affiliations

- Memberships: Phi Beta Kappa, American Geophysical Union, American Quaternary Association, Northwest Geology Society, Northwest Paleontological Society
- Volunteer Math Teacher, The Option Program at Seward Public School (T.O.P.S.)
- Volunteer Museum Curator, The Burke Memorial Museum, University of Washington
- Accordianist & Salsa Dancer

Publications

1972 -- A.T. Anderson, T.F. Braziunas, J. Jacoby, and J.V. Smith, Thermal and mechanical history of breccias 14306, 14063, 14270, and 14321, Proc. Third Lunar Sci. Conf. **1**: 819-835.

1975 -- T.F. Braziunas, A geological duration chart, Geol. Bull. **3**: 342-343.

1985 -- M. Stuiver and T.F. Braziunas, Compilation of isotopic dates from Antarctica, Radiocarbon **27**: 117-304.

1986 -- M. Stuiver, G.W. Pearson, and T.F. Braziunas, Radiocarbon age calibration of marine samples back to 9000 cal yr BP, Radiocarbon **28**: 980-1021.

1986 -- M. Stuiver and T.F. Braziunas, Fossil fuel combustion, deforestation, climatic change and related tree-ring ^{13}C, Dept. of Energy technical report, 46 pp.

1987 -- M. Stuiver and T.F. Braziunas, Tree cellulose $^{13}C/^{12}C$ isotope ratios and climatic change, Nature **327**: 58-60.

1988 -- M. Stuiver and T.F. Braziunas, The solar component of the atmospheric ^{14}C record, <u>In</u> Secular Solar and Geomagnetic Variations in the Last 10,000 Years, eds. F.R. Stephenson and A.W. Wolfendale, p. 245-266, Dordrecht, Kluwer.

1989 -- M. Stuiver and T.F. Braziunas, Atmospheric ^{14}C and century-scale solar oscillations, Nature **338**: 405-408.

1990 -- T.F. Braziunas, Nature and origin of variations in late-glacial and Holocene atmospheric ^{14}C determined by means of global carbon cycle modeling, Ph.D. dissertation, University of Washington, 342 pp.

1991 -- M. Stuiver, T.F. Braziunas, B. Becker, and B. Kromer, Climatic, solar, oceanic, and geomagnetic influences on late-glacial and Holocene atmospheric $^{14}C/^{12}C$ change, Quaternary Research **35**: 1-24.

1991 -- M. Stuiver and T.F. Braziunas, Isotopic and solar records, <u>In</u> Global Changes of the Past, ed. R.S. Bradley, p.225-244, UCAR/Office for Interdisciplinary Earth Studies, Boulder, Co.

1991 -- R. Bradley, T. Braziunas, J. Cole, J. Eddy, M. Hughes, J. Jouzel, W. Karlen, K. Kelts,

E. Mosley-Thompson, A. Ogilvie, J. Overpeck, J. Pilcher, N. Rutter, M. Stuiver and T. Wigley, Global change: The last 2000 years, In Global Changes of the Past, ed. R.S. Bradley, p.225-244, UCAR/Office for Interdisciplinary Earth Studies, Boulder, Co.

1991 -- M. Stuiver and T.F. Braziunas, Carbon isotope labels as mirrors of global change, 14th International Radiocarbon Conference, Abstract, Radiocarbon **33**: 248.

1991 -- T.F. Braziunas, I.Y. Fung and M. Stuiver, Oceanic and solar forcing of natural geographic variations in atmospheric $\Delta^{14}C$, 14th International Radiocarbon Conference, Abstract, Radiocarbon **33**: 180.

1992 -- M. Stuiver and T.F. Braziunas, Evidence of solar activity variations, In Climate Since A.D. 1500, eds. R.S. Bradley and P.D. Jones, p. 593-605, Unwin Hyman, London.

1993 -- M. Stuiver and T.F. Braziunas, Modeling atmospheric ^{14}C influences and radiocarbon ages of marine samples to 10,000 BC, Radiocarbon **35**: 137-189.

1993 -- M. Stuiver and T.F. Braziunas, Sun, ocean, climate and atmospheric $^{14}CO_2$: An evaluation of causal and spectral relationships, The Holocene **3**: 289-302.

1994 -- T.F. Braziunas, Book review: Global Climates Since the Last Glacial Maximum, Quaternary Research **42**: 363.

1995 -- T.F. Braziunas, I.Y. Fung and M. Stuiver, The pre-industrial atmospheric $^{14}CO_2$ latitudinal gradient as related to exchanges among atmospheric, oceanic and terrestrial reservoirs, Global Biogeochemical Cycles **9**: 565-584.

1995 -- M. Stuiver, P.M. Grootes and T.F. Braziunas, The GISP2 $\delta^{18}O$ climate record of the past 16500 years and the role of the sun, ocean, and volcanoes, Quaternary Research **44**: 341-354.

1997 – M. Stuiver, T.F. Braziunas, P.M. Grootes, and G.A. Zielinski, Is there evidence for solar forcing of climate in the GISP2 oxygen isotope record? Quaternary Research **48**: 259-266.

1998 -- M. Stuiver and T.F. Braziunas, Anthropogenic and solar components of hemispheric ^{14}C. Geophysical Research Letters **25**: 329- 332.

1998 -- Stuiver M., P.J. Reimer and T.F.Braziunas, High-precision radiocarbon age calibration for terrestrial and marine samples. Radiocarbon **40**: 1127-1151

2000 -- M. Stuiver, P.D. Quay and T.F. Braziunas, Isotope and carbon cycle inferences, In The Carbon Cycle, eds. T.M.L. Wigley and D.S. Schimel, p. 153-160. Cambridge Univ. Press.

2003 – J. Mundell, C. Celene-Martel and T. Braziunas. An organizational model for instructional support at a community college. Information Technology and Libraries **22**: 61-67.