
BIOGRAPHICAL SKETCH

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NAME White, DR	POSITION TITLE Professor of Anthropology and Mathematical Behavioral Sciences		
eRA COMMONS USER NAME XXXX			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Minnesota (Travelling Scholar: Univ. Michigan,	M.A.	1964	Anthropology Mathem.Psychology)
University of Minnesota (NIMH Visiting Scholar: Columbia University,	Ph.D.	1969	Anthropology Mathem.Sociology)

A. Positions and Honors.

Positions and Employment

1969-1976 Assistant/Associate Professor, Department of Anthropology, Univ. of Pittsburgh
1976-1979 Associate Professor, Comparative Culture and Social Sciences, UC Irvine
1982-present Professor, Anthropology, University of California, Irvine
2004-2010 External Faculty, Santa Fe Institute (concurrent)

Other Experience and Professional Memberships

1967 Fellow: American Anthropological Association, Society for Applied Anthropology.
1968 Staff Anthropologist, Quantitative Anthropology Summer Seminar, National Science Foundation.
1970 Research Associate, Project IMPRESS (John Kemeny), Dartmouth College.
1971-1973 Deputy Director, Irish Republic, National Language Attitudes Project, Ministry of Finance.
1980-1981 Chair, Academic Senate Committee on Courses.
1980-1981 Executive Committee of the UC Academic Senate, Irvine Division.
1980-1981 Founding Chair, Social Networks PhD. Program, UC Irvine.
1992-1993 President, Social Science Computing Association.
1994-present Member, Institute for Mathematical Behavioral Sciences, UC Irvine.
1994-1996 Chair, UCI Senate Committee on International Education.
1994-1996 Executive Committee of the UC Academic Senate, Irvine Division.
1995-2006 Graduate Director, Ph.D. Program in Social Networks.
2004-present Chair, Social Networks and Dynamics research group in Mathematical Behavioral Sciences.
2004- Editor-in-Chief, Structure and Dynamics: eJournal of Anthropological and Related Sciences, UC eScholarship Publications.
2008-2009 Science Chair, Scientific Council, Reseau national des systemes complexes (RNSC), Paris.

Honors

1963-1964 NSF Cooperative Pre-doctoral Fellow.
1964-1967 National Institute of Mental Health Pre-doctoral Fellow.
1989-1991 Alexander von Humboldt Award (2 years). Distinguished Senior U.S. Research Scientist.
1991-1992 Awardee, Bourse de Haute Niveau, Ministère de la Recherche et de la Technologie, Paris.
2004 Outstanding Article Award in Mathematical Sociology, American Sociological Association.
2005-2006 Viviana Zelizer Distinguished Scholarship Award of the American Sociological Association, outstanding article published in the field of economic sociology in the previous two years.
1981-1984 Center for Advanced Studies Fellow, Western Behavioral Science Institute.

B. Selected peer-reviewed publications (in chronological order).

(Publications selected from 113 peer-reviewed publications)

networks

1. 1991 Centrality in valued graphs: A measure of betweenness based on network flow. LC Freeman, SP Borgatti and DR White. *Social Networks* 13(2): 141-154. (Author of algorithm: DR White).
2. 1992 Structure and Dynamics of the Global Economy: Network Analysis of International Trade 1965-1980. (D Smith and DR White) *Social Forces* 70:857-894. (Author of algorithm: DR White).
3. 1994 Centrality Measures for Oriented Graphs. DR White and SP Borgatti. *Social Networks* 16:335- 346.
4. 1996 Kinship networks and discrete structure theory: Applications and implications. DR White and P Jorion. Special Issue on Social Network and Discrete Structure Analysis. *Social Networks* 18(3): 267-314.
5. 2001 The Cohesiveness of Blocks in Social Networks: Connectivity and Conditional Density. DR White, Frank Harary, *Sociological Methodology* 2001 pp. 305-359.
6. 2003 Structural Cohesion and Embeddedness: A Hierarchical Conception of Social Groups. J Moody, DR White. *American Sociological Review* 68(1):1-25.
7. 2003 DR White. Ties, Weak and Strong. *Encyclopedia of Community* Vol. 4:1376-1379.
8. 2004 DR White. Ring Cohesion in Marriage and Social Networks. *Social Networks* special issue edited by Alain Degenne *Mathematiques et sciences humaines* 43(#168):5-28.
9. 2004 DR White. Network Analysis and Social Dynamics, *Cybernetics and Systems* 35(2-3):173-192
10. 2005 Network Dynamics and Field Evolution: The Growth of Interorganizational Collaboration in the Life Sciences. WW Powell, DR White, KW Koput J Owen-Smith. *American Journal of Sociology* 110(4):901-975.
11. 2005 DR White and Ulla Johansen. Network Analysis and Ethnographic Problems: Process Models of a Turkish Nomad Clan. Paperback'06. Boston: Lexington Press/AltaMira.
12. 2006 A Generative Model for Feedback Networks. DR White, N Kejžar, C Tsallis, D Farmer, and SD White. *Physical Review E*, 016119 11pp.
13. 2007 Network Structures in Industrial Pricing: The Effect of Emergent Roles in Tokyo Supplier-Chain Hierarchies. T Nakano and DR White. *Structure and Dynamics* 2(3):130-154.
14. 2007 Role Models for Complex Networks, J Reichart and DR White. *European Physical Journal B* 60: 217-224.
15. 2009 DR White. Innovation in the Context of Networks, Hierarchy and Cohesion. Pp. 153-193. In D Lane, G West, S van der Leeuw, D Pumain (Eds.), *A New Perspective on Innovation and Social Change*. Dordrecht: Springer (Methodos series).
16. 2009 DR White. Accepted. Kinship, Class, and Community. In P. Carrington, J. C. Scott (Eds.), Chapter 10: *Sage Handbook of Social Networks*.

methods

17. 1982 Network Autocorrelation: A Simulation Study of a Foundational Problem in the Social Sciences. MM Dow, ML Burton, and DR White. *Social Networks* 4(2):169-200.
18. 1990 DR White. Reliability in Comparative and Ethnographic Observations: The Example of High Inference Father-Child Interaction Measures, *Journal of Quantitative Anthropology* 2: 109-150.
19. 1994 DR White. Fisher-B: A Program for an Exact Significance Test for Three-Way Interaction Effects. *World Cultures* 8(2):37-39.
20. 1999 DR White. Vladimir Batagelj and Andrej Mrvar, Analyzing Large Kinship and Marriage Networks with Pgraph and Pajek, *Social Science Computer Review* 17(3):245-274.
21. 2007 Standard Cross-Cultural Sample: on-line edition, GP Murdock and DR White. *Social Dynamics and Complexity eScholarship Repositories*
22. 2009 DR White. Standard Cross-Cultural Sample. 9pp. *International Encyclopedia of the Social Sciences*, 2nd edition. New York: Macmillan Reference USA.

dynamics

23. 2008 Oscillatory dynamics of city-size distributions in world historical systems. DR White, L Tambayong, and N Kejžar). In, G Modelski, T Devezas and W Thompson, eds. *Globalization as Evolutionary Process: Modeling, Simulating, and Forecasting Global Change*. pp. 190-225. London: Routledge.
24. 2010 in press DR White. Dynamics of Human Behavior (Cohesion and Resistance). *Encyclopedia of Complexity and Systems Science*. Berlin, Heidelberg: Springer-Verlag.

C. Research Support

Ongoing Research Support

private foundation funding to UC Regents for SND 10/30/2004-present

Private Foundation (anonymous)

Support of the Institute for Mathematical Behavioral Sciences faculty research group in Social Networks and Dynamics, the Structure and Dynamics eJournal (UC eScholarship Repository) and for participation in Santa Fe Institute working groups and research projects.

Role: PI (Group Chair)

Completed Research Support

ISCOM 1/1/2002-12/31/2005

European Union Grant: Information Society as a Complex System,
Subcontract component on Social Networks and Innovation

Role: Subcontractor:

Santa Fe Institute White/Wright 4/2004 - 5/2004

Workshop on Modeling Macrosocial System Dynamics.

Role: Co-Organizer

NSF White(PI) 2000 - 2002

Undergraduate Research Training Awards. (2 awards)

Role: PI

BCS-9978282 White(PI) 1999 - 2002

NSF

Longitudinal Network Studies and Predictive Social Cohesion Theory

Role: PI

UC / MEX-27878 PI 7/1/2000 - 6/30/2002

UC Mexus

Historical social networks in Tzintzuntzan, Morelos, Mexico

Role: PI

Development Grant, Anthropology and Demography 1997 - 2000

Mellon Program

Postdoc project for Eric Widmer, University of Geneva

Role: PI

UC Office of the President PI 1997 - 1998

Interuniversity Academic Initiatives Funding

Role: PI

UC Office of the President PI 1996 - 1997

Interuniversity Academic Initiatives Funding

Role: PI

California Institute of Technology 1995 - 1996

Mellon Program Development Grant in Anthropology and Demography

Long term kinship and network demography in China:

Postdoc project for James Lee, California Institute of Technology at UC, Irvine

Role: PI

Faculty Senate Cultural Diversity Grant 1995 - 1996

UCI

The Historical Omaha and their Social Networks

Role: PI

Faculty Senate Research Fellowship / IRF-43 1994 - 1995

Longitudinal Studies in Anthropological Field Sites

Role: PI

NSF SBR-9310033 PI 1993 – 1995
NSF / Humboldt foundation
Network Analysis of Kinship, Social Transmission and Exchange: Cooperative Research at UCI, UNI Cologne, CNRS
Paris
Role: Co-PI

OTHER NSF GRANTS Co-PI 1988 – 1990
Various cultural 1986 – 1988
 research projects 1986 – 1988
 UC Irvine 1985 – 1987
Co-PI 1981 – 1983
Co-PI University of Pittsburgh 1976 – 1976

Wenner-Gren Foundation for Anthropological Research 1986 - 1987
Anthropological Development Field Studies conferences 1985
Development Research Planning Conference
Role: PI

UC Faculty research Awards 1985 - 1986
Macro-Cultures Research
Role: PI

University of California, Irvine 1979 -1980
Instructional Development of Campus-wide Social Science Data Computer Access Project
Role: PI

Committee on Instructional Development, UC Irvine 1977 - 1979
Projects MECA (Maximum Extensibility of Comparative Analysis)
and NETWORKER (Social Network Analysis),
Role: PI