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Education

- 2002-2003 Postdoctoral Research Fellow, Global Health Studies Program, University of Iowa, USA.
- 2001 Ph.D. in Anthropology, University of Auckland, New Zealand.
- 1997 M.A. in Anthropology (first class honors), University of Auckland, New Zealand.
- 1995 B.A. in Anthropology, University of Auckland, New Zealand.

Research Interests

Biocultural anthropology, biological anthropology, evolutionary medicine, medical anthropology, human biology, mental and behavioral disorders (schizophrenia, social cognition, drug use/addiction), Micronesia/Oceania.

Professional Appointments

- 2009- Associate Professor, Dept. of Anthropology, California State University, Sacramento.
- 2007- Assistant Adjunct Professor (research), Dept. of Psychiatry and Behavioral Sciences, University of California, Davis, School of Medicine.
- 2003-2009 Assistant Professor, Dept. of Anthropology, California State University, Sacramento.
- 2002-2003 Postdoctoral Research Fellow, Global Health Studies Program, University of Iowa.
- 2001-2002 Research Fellow, Dept. of Anthropology, University of Auckland.
- 2001 Lecturer, Dept. of Anthropology, University of Auckland.
- 2000 Graduate Teaching Assistant, Anthropology Dept, University of California, Santa Barbara.
- 1995-1999 Graduate Teaching Assistant, Dept. of Anthropology, University of Auckland.

Peer Reviewed Publications

- Sorensen-Forbey JS, Harvey A, Huffman M, Provenza F, Sullivan RJ, Tasdemir D (2009). Exploitation of secondary metabolites by animals: A response to homeostatic challenges. *Integrative and Comparative Biology*, Online Advance Access June 22, 2009.
- Schmidt R, Morris G, Hagen EH, Sullivan RJ, P Hammerstein, Kempter R (2009). The dopamine puzzle. *Proceedings of the National Academy of Sciences*, 106: 27, E75.
- Lyle HF, Smith EA, Sullivan RJ. Why do donors share? Blood donations as costly signals of donor quality. *Journal of Evolutionary Psychology*. In press.
- Lyle HF, Sullivan RJ. Cognitive adaptation and collective action: The P2P file sharing phenomenon. In N Kock (ed) "Evolutionary Psychology and Information Systems Research: A New Approach to Studying the Effects of Modern Technologies on Human Behavior". Springer. In press.
- Hagen EH, Sullivan RJ, Schmidt R, Morris G, Kempter R, and P Hammerstein (2009). Ecology and neurobiology of toxin avoidance and the paradox of drug reward. *Neuroscience*, 160: 69-84.
- Sullivan RJ, Hagen E, Hammerstein P (2008). Revealing the paradox of drug reward in human evolution. *Proceedings of the Royal Society. Part B*, 275: 1640, 1231–1241.
- Sullivan RJ, Allen JS, Nero KL (2007). Schizophrenia in Palau: A biocultural analysis. *Current Anthropology*, 48: 2, 189-213.
- Sullivan RJ, Andres S, Otto C, Miles W, Kydd R (2007). The effects of an indigenous muscarinic drug, betel nut (*Areca catechu*), on the symptoms of schizophrenia: A longitudinal study in Palau, Micronesia. *American Journal of Psychiatry*, 164: 4, 670-673.
- Lyle HF, Sullivan RJ (2007). Competitive status signaling in peer-to-peer file-sharing networks. *Evolutionary Psychology*, 5: 2, 363-382.
- Sullivan RJ, Lyle H (2005). Economic models are not evolutionary models. *Behavioral and Brain Sciences*, 28: 6, 836.
- Sullivan RJ, Allen JS (2004). Natural selection and schizophrenia. *Behavioral and Brain Sciences*, 27: 6, 865-866.
- Sullivan RJ, Hagen EH (2002). Psychotropic substance-seeking: evolutionary pathology or adaptation? *Addiction*, 97: 4, 389-400. (special issue E. Hill & D Newlin eds. *Evolutionary Psychobiological Approaches to Addiction*).
- Sullivan RJ, Allen JS (2002). Impaired Machiavellian social dexterity in schizophrenia: Clinical implications. *Compendium Series: Psychosis and Schizophrenia*, 1: 11-12.
- Sullivan RJ, Allen JS, Otto C, Tiobech J, Nero K (2000). The effects of chewing betel nut

(*Areca catechu*) on the symptoms of people with schizophrenia in Palau, Micronesia. *The British Journal of Psychiatry*, 177: 174-178.

Sullivan RJ, Allen JS (1999). Social deficits associated with schizophrenia defined in terms of interpersonal Machiavellianism. *Acta Psychiatrica Scandinavica*, 99: 148-154.

Forthcoming

Sullivan RJ, Hagen EH. Substance Use and Human Evolution (n. d.). To appear in P Andrews, E Hagen, M Keller, S Gangestad (eds) "Design or Disorder: The Evolution and Classification of Human Misery". Oxford University Press.

Sullivan RJ, Hagen EH (n. d.). Plant toxins in human evolution: Constraints, contingencies, and co-adaptation. To appear in *Evolutionary Anthropology*.

Submitted for Peer Review

Hagen EH, Roulette C, Hewlett B, Sullivan R, Laganier R. (n. d.) Tobacco use as a possible example of human pharmacophagy: Smokers among Central African foragers have fewer worms than non-smokers.

Sullivan RJ, Hagen EH (n. d.). An Evolutionary Ecology of Human Drug Use. Book proposal submitted to *University of California Press*.

In Preparation

Sullivan RJ (n. d.). Social and cultural stressors affecting the expression of schizophrenia in a "developing" setting: Results from a longitudinal study in Palau, Micronesia.

Sullivan RJ et al. (n. d.). Are precautionary and social rules content dependent? An analysis of people with schizophrenia and autism.

Theses

Sullivan RJ (2001). 'The Use of Betel Nut and Other Psychoactive Substance, and Their Effects on the Symptoms of People with Schizophrenia in Palau, Micronesia'. Doctoral Thesis, Department of Anthropology, University of Auckland.

Sullivan RJ (1997). 'Machiavellian Intelligence and Schizophrenia'. Master's Thesis, Department of Anthropology, University of Auckland.

Invited Talks

2009 'The Evolutionary Mechanism of Action of Neurotoxins: Punishment or Reward?' Invited Symposia. Society for Integrative and Comparative Biology Annual Meeting. Boston, MA.

2008 'Mental Health in "Traditional" Societies: The Impacts of Economic Change and Globalization in Palau, Micronesia'. Division of Anthropology. American Museum of Natural History, New York, NY.

2008 'The Puzzle of Schizophrenia: Insights From Micronesia'. Dept. of Anthropology. UC

- Los Angeles, Los Angeles, CA.
- 2008 'Revealing the Paradox of Drug Reward in Human Evolution'. UCLA Center for Behavior, Evolution and Culture. UC Los Angeles, Los Angeles, CA.
- 2007 'The Wason Selection Task and Logical Reasoning in Schizophrenia'. Translational Cognitive and Affective Neuroscience Lab Group. UC Davis Psychiatry and Behavioral Sciences, Sacramento, CA.
- 2006 'Betel Chewing and Schizophrenia in Palau Micronesia'. Translational Cognitive and Affective Neuroscience Lab Group. UC Davis Psychiatry and Behavioral Sciences, Sacramento, CA.
- 2006 'Does Plant-mammalian Co-Evolution Exclude Reward Models of Drug Seeking?' Institute for Theoretical Biology, Humboldt University, Berlin, Germany.
- 2005 'Beyond Reward Models of Drug Abuse: Prospects for an Evolutionary Ecology of Substance Use'. Institute for Theoretical Biology Autumn Meeting *Evolutionary Medicine: An Emerging Synthesis*. Humboldt University, Berlin, Germany.
- 2005 'Schizophrenia in Cross-Cultural Contexts'. Institute for Theoretical Biology Autumn Meeting *Evolutionary Medicine: An Emerging Synthesis*. Humboldt University, Berlin, Germany.
- 2005 'Psychoactive Substance Use: Psychopathology or Adaptation?' UC Davis Dept. of Anthropology Colloquium. UC Davis, Davis, CA.
- 2005 'Psychoactive Substance Use: Psychopathology or Adaptation?' Dept. of Anthropology. Binghamton University, Binghamton, NY.
- 2004 'Schizophrenia in a Cross Cultural Context: Results of a Two Year Study in Palau'. UC Davis Dept. of Psychiatry Grand Rounds. UC Davis Psychiatry and Behavioral Sciences, Sacramento, CA.
- 2003 'Schizophrenia in Palau: Biocultural Dimensions'. Dept. of Anthropology. University College London, London, United Kingdom.
- 2002 'Schizophrenia in Palau: Biocultural Dimensions'. Anthropology Colloquium. University of Iowa, Iowa City, IA.
- 2002 'Cultural Diversity and Schizophrenia'. The Annual New Zealand Schizophrenia Fellowship Research Meeting. Wellington, New Zealand.
- 1999 'Social Deficits in Schizophrenia: An Evolutionary Perspective'. Anthropology Colloquium. University of California Santa Barbara. Santa Barbara, CA.

Conference Papers and Posters

- 2009 'Wason Selection Task Performance in Schizophrenia and Autism'. The 21st Annual Conference of the Human Behavior and Evolution Society, Los Angeles, CA. (with M Solomon, M Minzenberg, JD Ragland, J Yoon, S Ursu, E Ermer and C Carter)
- 2009 'Drug use as potential protection against pathogens: Tobacco consumption vs. helminth load in Aka foragers'. The 21st Annual Conference of the Human Behavior and Evolution Society, Los Angeles, CA. (with E.H. Hagen, C. Roulette, B.S. Hewlett)
- 2009 'Blood Donations As Costly Signals of Donor Quality'. The 21st Annual Conference of the Human Behavior and Evolution Society, Los Angeles, CA. (with HF Lyle and EA Smith).
- 2009 'Are Social Deficits Content Dependent? Wason Selection Task Performance in ASD and Schizophrenia'. The 8th Annual International Meeting for Autism Research, Chicago, IL. (with M Solomon, M Minzenberg, JD Ragland, J Yoon, S Ursu, E Ermer and C Carter)
- 2009 'The expensive-tissue hypothesis and plant neurotoxins: Comparative analysis of

- metabolic hepatic enzymes indicates hominin diet shift'. The 78th Annual Meeting of the American Association of Physical Anthropologists, Chicago, IL. (with EH Hagen)
- 2009 'Plant neurotoxins and brain development: Implications for encephalization in *Homo*'. The 78th Annual Meeting of the American Association of Physical Anthropologists, Chicago, IL. (with EH Hagen)
- 2008 'Why Do Donors Share? Blood Donations As Costly Signals of Donor Quality'. The 107th Annual Meeting of the American Anthropological Association, San Francisco, CA. (with HF Lyle and EA Smith).
- 2008 'Perceptions of Natural in the Domains of Food and Medicine'. The 107th Annual Meeting of the American Anthropological Association, San Francisco, CA. (with J Serin)
- 2008 'Revealing the Paradox of Drug Reward in Human Evolution'. The 20th Annual Conference of the Human Behavior and Evolution Society, Kyoto, Japan. (with EH Hagen and P Hammerstein)
- 2008 'Human Counter-exploitation of Plant Neurotoxins: Towards Resolving the Paradox of Drug Reward'. The 20th Annual Conference of the Human Behavior and Evolution Society, Kyoto, Japan. (with EH Hagen and P Hammerstein)
- 2008 'Perceptions of Natural in the Domains of Food and Medicine'. The 20th Annual Conference of the Human Behavior and Evolution Society, Kyoto, Japan. (with J Serin)
- 2007 'Comparative Reduction in Cytochrome P450 Genes in *Homo sapiens*: Implications for Hominid Diet Shift and Encephalization'. The 32nd Annual Meeting of the Human Biology Association, Philadelphia, PA. (with EH Hagen)
- 2007 'Plant Neurotoxins and Brain Development: Implications for Encephalization in *Homo*'. The 32nd Annual Meeting of the Human Biology Association, Philadelphia, PA. (with EH Hagen)
- 2007 'The Paradox of Drug Reward in Human Evolution'. The 76th Annual Meeting of the American Association of Physical Anthropologists. Philadelphia, PA. (with EH Hagen and P Hammerstein)
- 2007 'Human Counter-exploitation of Plant Neurotoxins: Towards Resolving the Paradox of Drug Reward'. The 76th Annual Meeting of the American Association of Physical Anthropologists. Philadelphia, PA. (with EH Hagen and P Hammerstein)
- 2006 'Risk-Taking and Competitive Status-Signaling in P2P File-Sharing Networks'. The 18th Annual Conference of the Human Behavior and Evolution Society. Philadelphia, PA. (with HF Lyle)
- 2006 'Self-medicating for Psychiatric Illness in a "Traditional" Culture: Schizophrenia and Betel Chewing in Palau'. The 31st Annual Meeting of the Human Biology Association, Anchorage, AL. (with JS Allen, S Andres and C Otto)
- 2005 'Emotional Reward As Motivation for Human Drug Use: An Evolutionary Critique'. The 17th Annual Conference of the Human Behavior and Evolution Society. Austin, TX.
- 2005 'P2P File Sharing as Costly Signaling'. The 17th Annual Conference of the Human Behavior and Evolution Society. Austin, TX. (with HF Lyle)
- 2004 'Making Sense of Mental Illness: Schizophrenic Stressors in "Traditional" Settings'. Department of Anthropology 50th Anniversary Conference, California State University, Sacramento, Sacramento, CA.
- 2003 'Human Genetic Polymorphisms of Hepatic Enzymes: Physiological Evidence of Human Dietary Patterns and Exposure to Psychoactive Substances in Prehistory'. The 72nd Annual Meeting of the American Association of Physical Anthropologists. Tempe, AZ.

- 2003 'The Effects of Betel Nut (*Areca catechu*) on the Symptoms of People With Schizophrenia'. The 28th Annual Meeting of the Human Biology Association, Tempe, AZ.
- 2003 'The Effects of Betel Chewing on the Symptoms of People With Schizophrenia in Palau Micronesia: A Longitudinal Study'. The 21st Annual Meeting of the Society for Applied Anthropology. Portland, OR.
- 2000 'Substance-seeking Behavior in Schizophrenia: EEA Mismatch or Psychological Adaptation?' The 12th Annual Conference of the Human Behavior and Evolution Society. Amherst, MA. *Winner of the Best Poster Award.*
- 2000 'Social Thinking in Schizophrenia: Implications for the Consumers of Mental Health Services'. The 18th Annual Meeting of the Society for Applied Anthropology. San Francisco, CA. (with KL Schmidt and JS Allen)
- 1999 'The Effects of Betel Chewing on the Symptoms of People With Schizophrenia in Palau, Micronesia'. The Annual New Zealand Schizophrenia Fellowship Research Meeting. Wellington.
- 1997 'Machiavellian Intelligence and Schizophrenia'. The 9th Annual Conference of the Human Behavior and Evolution Society. Tucson, AZ. (with AA Brewis)
- 1996 'Cuckoldry, Divorce and Evolution: A study of New Zealand Supreme Court statistics of divorce 1922-1987'. The 8th Annual Conference of the Human Behavior and Evolution Society. Evanston, IL. (with JS Allen)

Extramural Research Grants

2002-2004

Stanley Medical Research Institute Research Grant 02R-225 (Bethesda, MD).
Principal Investigator.

- 2002 New Zealand Schizophrenia Fellowship Research Award.
- 2001 New Zealand Schizophrenia Fellowship Research Award.
- 1999 New Zealand Schizophrenia Fellowship Research Award.
- 1999 Eli Lilly and Company (NZ) Ltd Study Grant.
- 1998 New Zealand Schizophrenia Fellowship Research Award.
- 1996 New Zealand Schizophrenia Fellowship Research Award.
- 1996 Kakano Fund M.A. Thesis Grant.

Extramural Research Grants: Proposals Under Review

- 2010 NIH/Fogarty International Center PAR-08-113 (R21) "The effects of economic change on mental health in low- to middle-income settings" Application number 3187584. Principal Investigator.

Internal Research Grants

- 2009 CSU Sacramento RCA Summer Research Fellowship.
- 2009 CSU Sacramento SSIS Professional Development Support Grant.
- 2008 CSU Sacramento RCA Summer Research Fellowship.
- 2008 CSU Sacramento UEI Professional Development Award.
- 2008 CSU Sacramento SSIS Professional Development Support Grant.
- 2007 CSU Sacramento RCA Summer Research Fellowship.
- 2007 CSU Sacramento SSIS Professional Development Support Grant.
- 2006 CSU Sacramento SSIS Professional Development Support Grant.

- 2005 CSU Sacramento SSIS Dean's award for disciplinary research and grant writing.
- 2005 CSU Sacramento SSIS Professional Development Support Grant.
- 2004 CSU Sacramento Research and Creative Activity (RCA) Award.
- 2004 CSU Sacramento SSIS Professional Development Support Grant.
- 2004 CSU Sacramento Research and Sponsored Projects travel grant.
- 1999 University of Auckland Research Committee Grant.
- 1999 University of Auckland Department of Anthropology Travel Grant.
- 1997 University of Auckland Research Committee Grant.

Scholarships, Fellowships and Prizes

- 2002 University Prize for Best Doctoral Thesis in The Faculty of Arts (2001), University of Auckland, New Zealand.
- 2000 Best Poster Prize. 12th Annual Meeting of the Human Behavior and Evolution Society, Amherst College, USA.
- 1999 Claude McCarthy Fellowship (New Zealand).
- 1999 University of California Education Abroad Program Scholarship.
- 1997 University of Auckland Doctoral Scholarship.
- 1995 Annual Prize for Best Student in Anthropology, University of Auckland.

Courses Taught

Introduction to Biological Anthropology (University of Auckland)
Evolution, Behavior and Cognition (University of Auckland – asst. lecturer)
Global Health Studies Seminar (University of Iowa)
Introduction to Physical Anthropology (CSUS)
Method and Theory in Physical Anthropology (CSUS)
Evolution of Human Behavior (CSUS)
Evolutionary Medicine (CSUS)
Graduate Seminar in Physical Anthropology (CSUS)

Professional Service (Peer review and commentary)

Addiction
Acta Psychiatrica Scandinavica
Behavioral and Brain Sciences
British Journal of Psychiatry
Current Anthropology
Journal of the Polynesian Society
Medical Anthropology Quarterly
National Science Foundation
Oxford University Press
Prentice Hall College Editorial (Pearson Education)
Psychiatry Research