

Ian C. Gilby, Ph.D.

Curriculum Vitae, January 2012

Department of Evolutionary Anthropology
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EDUCATION

- 2004 Ph.D. Zoology UNIVERSITY OF MINNESOTA, Minneapolis, MN
Department: Ecology, Evolution and Behavior
Dissertation: Hunting and meat sharing among the Gombe chimpanzees
Advisor: Anne E. Pusey
- 1996 B.A. Biology CARLETON COLLEGE, Northfield, MN
Cum Laude

PROFESSIONAL APPOINTMENTS

- Senior Research Scientist DUKE UNIVERSITY, Durham, NC
2010 – present
Department of Evolutionary Anthropology
JGI Research Center
- Postdoctoral Researcher HARVARD UNIVERSITY, Cambridge, MA
2005 – 2009
Department of Human Evolutionary Biology
- Lecturer HARVARD UNIVERSITY, Cambridge, MA
2008 – 2009
Department of Human Evolutionary Biology
- Instructor HARVARD UNIVERSITY EXTENSION SCHOOL, Cambridge, MA
2006 – 2008
Department of Anthropology
- Visiting Lecturer BOSTON UNIVERSITY, Boston, MA
2007
Department of Anthropology

PEER-REVIEWED PUBLICATIONS

- Crofoot, M.C. & **Gilby, I.C.** 2012. Cheating monkeys undermine group strength in enemy territory. Proceedings of the National Academy of Sciences, USA 109: 501-505.
- Gilby, I.C.** 2012 Nonkin cooperation: reciprocity, markets and mutualism. In: *Evolution of Primate Societies* (Ed. by Mitani, J., Call, J., Kappeler, P., Palombit, R., & Silk, J.). Chicago, IL: University of Chicago Press. *In press*.
- Pintea, L., Pusey, A.E., Wilson, M.L., **Gilby, I.C.**, Collins, D.A., Kamenya, S., Goodall, J. 2012. Long-term ecological changes affecting the chimpanzees of Gombe National Park, Tanzania. In: *Long Term Changes in Africa's Rift Valley: impacts on biodiversity and ecosystems* (Ed. by Plumptre, A.J.). New York: Nova Science Publishers. *In press*.
- Lonsdorf, E.V., Murray, C.M., Lonsdorf, E.V., Travis, D.A., **Gilby, I.C.**, Chosy, J., Pusey, A.E., Goodall, J. 2011. A retrospective analysis of factors correlated to chimpanzee (*Pan troglodytes schweinfurthii*) respiratory health at Gombe National Park. EcoHealth 8:26-35.
- Gilby, I.C.**, Emery Thompson, M., Ruane, J., Wrangham, R.W. 2010. No evidence of short-term exchange of meat for sex among chimpanzees. Journal of Human Evolution 59: 44-53.

- Gilby, I.C.** & Connor, R.C. 2010. The role of intelligence in group hunting: Are chimpanzees different from other social predators? In: *The Mind of the Chimpanzee: Ecological and Experimental Perspectives* (Ed. by Lonsdorf, E. V., Ross, S. R. & Matsuzawa, T.), pp 220-233. Chicago, IL: University of Chicago Press.
- Gilby, I.C.**, Pokempner, A. A., Wrangham, R. W. 2010. A direct comparison of scan and focal sampling methods for measuring wild chimpanzee feeding behaviour. *Folia Primatologica* 81: 254-264.
- Foster, M.W., **Gilby, I.C.**, Murray, C.M., Johnson, A., Wroblewski, E.E., Pusey, A.E. 2009. Alpha male chimpanzee grooming patterns: implications for dominance 'style'. *American Journal of Primatology* 71: 136-144.
- Tennie, C., **Gilby, I.C.**, Mundry, R. 2009. The meat-scrap hypothesis: small quantities of meat may promote cooperative hunting in wild chimpanzees. *Behavioral Ecology and Sociobiology* 63: 421-431.
- Gilby, I.C.** & Wrangham, R.W. 2008. Association patterns among wild chimpanzees (*Pan troglodytes schweinfurthii*) reflect sex differences in cooperation. *Behavioral Ecology and Sociobiology* 62: 1831-1842.
- Gilby, I.C.**, Eberly, L.E., Wrangham, R.W. 2008. Economic profitability of social predation among wild chimpanzees: individual variation promotes cooperation. *Animal Behaviour* 75: 351-360.
- Crofoot, M.C., **Gilby, I.C.**, Wikelski, M.C., Kays, R.W. 2008. Interaction location outweighs the competitive advantage of numerical superiority in *Cebus capucinus* intergroup contests. *Proceedings of the National Academy of Sciences, USA* 105: 577-581.
- Murray C.M., **Gilby I.C.**, Mane S.V., Pusey A.E. 2008. Adult male chimpanzees inherit maternal ranging patterns. *Current Biology* 18: 20-24.
- Wrangham, R.W., Crofoot M.C., Lundy R., **Gilby I.C.** 2007. Use of overlap zones in group-living primates: a test of the risk hypothesis. *Behaviour* 144: 1599-1619.
- Gilby, I.C.** & Wrangham, R.W. 2007. Risk-prone hunting by chimpanzees (*Pan troglodytes schweinfurthii*) increases during periods of high diet quality. *Behavioral Ecology and Sociobiology* 61: 1771-1779.
- Gilby, I.C.** 2007. Review of *Cooperation in Primates and Humans: Mechanisms and Evolution*. P. Kappeler and C. van Schaik, editors. (Springer-Verlag, 2006). *American Journal of Physical Anthropology* 132: 486-487.
- Emery Thompson, M., Kahlenberg, S.M., **Gilby, I.C.**, Wrangham, R.W. 2007. Within-community variation in habitat quality accounts for variance in reproductive success among female chimpanzees at Kibale National Park, Uganda. *Animal Behaviour* 73: 501-512.
- Gilby, I.C.**, Eberly, L.E., Pintea, L., Pusey, A.E. 2006. Ecological and social influences on the hunting behaviour of wild chimpanzees, *Pan troglodytes schweinfurthii*. *Animal Behaviour* 72: 169-180.
- Gilby, I.C.** 2006. Meat sharing among the Gombe chimpanzees: Harassment and reciprocal exchange. *Animal Behaviour* 71: 953-963.
- Stevens, J.R. & **Gilby, I.C.** 2004. A conceptual framework for non-kin food sharing: timing and currency of benefits. *Animal Behaviour* 67: 603-614.
- Gilby, I.C.** 2001. Why do wild male chimpanzees share meat with females? One alternative to the 'Meat for sex' hypothesis. In *The Apes: Challenges for the 21ST Century*, Chicago: Chicago Zoological Society. pp 321-323.

Articles in review or active preparation

- Gilby, I.C.**, Brent, L.J.N., Wroblewski, E.E., Rudicell, R.S., Hahn, B.H., Goodall, J. & Pusey, A.E. *In review*. Fitness benefits of coalitionary aggression in male chimpanzees.
- Gilby, I.C.** & Wilson, M.L. *In prep*. Ecological and social correlates of hunting and intergroup aggression in wild chimpanzees.
- Feldblum, J.T., Wroblewski, E.E. & **Gilby, I.C.** *In prep*. Genetic fitness effects of sexual coercion among the Gombe chimpanzees.

RESEARCH GRANTS

- The National Science Foundation, Award #1052693. Co-PIs: A. Pusey & **I. Gilby**. “LTREB: Female settlement patterns and social relationships in chimpanzees, a male-philopatric species”, \$422,300. 2011-2015.
- The National Science Foundation, Award #0416125. PI: R. Wrangham. “LTREB: Ecology and endocrinology of chimpanzee aggression”, \$298,891. 2004-2009. (Key personnel).
- The National Science Foundation, Award # IIS-0431141. Co-PIs: S. Shekar, J. Srivastava, A. Pusey, R. Wrangham. “Spatio-temporal data analysis techniques for behavioral ecology”, 2004-2007. \$576,375. (Key personnel).

Ph.D. Dissertation grants

L.S.B. Leakey Foundation, 2001	\$12,000
L.S.B. Leakey Foundation, 2000	\$ 8,000
Grants for Research Abroad (Univ. Minnesota), 2001	\$ 4,000
The Dayton-Wilkie Natural History Fund, 5 awards, 1998-2002	\$ 3,700
The Explorers Club, 2000	\$ 1,200
The Animal Behavior Society, 2001	\$ 1,000
The Sigerfoos Fund (Univ. Minnesota), 1998	\$ 700
Sigma Xi, 2000	\$ 700

RESEARCH EXPERIENCE

Senior Research Scientist 2010 – present	DUKE UNIVERSITY, Evolutionary Anthropology Ecological correlates of primate cooperation Management of Gombe Chimpanzee Database
Postdoctoral Researcher 2005 – 2009	HARVARD UNIVERSITY, Human Evolutionary Biology Supervisor: Richard W. Wrangham Primate behavioral ecology Design and management of Kibale Chimpanzee Database
Research Assistant 1998 – 2005	UNIVERSITY OF MINNESOTA, Ecology, Evolution & Behavior Supervisor: Anne E. Pusey. Chimpanzee behavioral ecology Management of Gombe Chimpanzee Database
Field Consultant 2006	KIBALE CHIMPANZEE PROJECT, Kibale N. P., Uganda Supervision and evaluation of long-term data collection (2 months)
Dissertation field work 1999-2002	GOMBE STREAM RESEARCH CENTRE, Gombe N.P., Tanzania, Chimpanzee meat sharing (12 months)
Field training 1998	THE ORGANIZATION FOR TROPICAL STUDIES, Costa Rica Graduate field course in tropical ecology (2 months)
Research Assistant 1995	NORTH CAROLINA STATE UNIVERSITY, Pisgah Forest, N.C. Supervisor: Roger A. Powell Black bear ecology: trapping, radio-telemetry, habitat sampling (3 months)
Undergraduate Research 1994	CARLETON COLLEGE, Northfield, MN Supervisor: Julia A. Emerson Developmental biology: differential-display PCR (1 year)

TEACHING EXPERIENCE

Instructor 2010	DUKE UNIVERSITY, Evolutionary Anthropology EA-280S: <i>Why be nice? The biological basis of cooperation</i>
Lecturer 2008-2009	HARVARD UNIVERSITY, Human Evolutionary Biology HEB 1330: <i>Primate Social Behavior</i> . Co-taught with R. Wrangham. HEB 1383: <i>Why be nice? The biological basis of cooperation</i>
Instructor 2006-2008	HARVARD UNIVERSITY EXTENSION SCHOOL ANTH E116/W: <i>Why be nice? The biological basis of cooperation</i>
Head Teaching Fellow 2007-2009	HARVARD UNIVERSITY, Human Evolutionary Biology HEB 97y: <i>Sophomore Tutorial in Human Evolutionary Biology</i> SB29: <i>Evolution of Human Nature</i>
Visiting Lecturer 2007	BOSTON UNIVERSITY, Anthropology AN331: <i>Human Origins</i>
Teaching Assistant 1998-2003	UNIVERSITY OF MINNESOTA, Ecology, Evolution & Behavior EEB 4329: <i>Primate Ecology and Evolution</i> (2003) BIOL 2012: <i>General Zoology</i> (1998, 1999, 2002)
Teaching Assistant 1993-1995	CARLETON COLLEGE, Biology <i>Vertebrate Histology</i> <i>Evolution</i> <i>Introductory Biology</i>

TEACHING AWARDS

Harvard University	Derek Bok Center for Teaching and Learning, Certificates of Distinction in Teaching, 2006-2007, 2007-2008, 2009-2010 Letters of Commendation for Distinguished Teaching Performance. Harvard University Extension School, 2006-2007, 2007-2008
University of Minnesota	College of Biological Sciences Award for Outstanding Performance as a Teaching Assistant, 2002

UNDERGRADUATE THESES ADVISED

- Miller, J. *in progress*. Core area defense in female chimpanzees. Duke University, Department of Evolutionary Anthropology.
- Burke, E. *in progress*. Sex differences in juvenile chimpanzee association patterns. Duke University, Department of Evolutionary Anthropology
- McLean, C.M. 2007. Arboreal behaviors of colobines and the slow flight hypothesis: exploring the ecology of chimpanzee prey selection. Harvard University, Department of Human Evolutionary Biology.
- Foster, M. 2005. Differential grooming patterns among alpha male chimpanzees. University of Minnesota Department of Anthropology
- Hughes, K. 2003. Chimpanzee food-sharing behavior: a closer look at individuals. University of Minnesota Department of Anthropology
- Beyer, J. 2003. Social impacts on chimpanzee hunting behavior. University of Minnesota, Department of Ecology, Evolution and Behavior.
- Johnson, J. 2001. Alliances between male chimpanzees at Gombe National Park. University of Minnesota, Department of Ecology, Evolution and Behavior.

INVITED TALKS & LECTURES

- BOSTON UNIVERSITY, DEPARTMENT OF ANTHROPOLOGY, March, 2009. Invited speaker. "Hunting and meat sharing among wild chimpanzees: Implications for human evolution".
- STONY BROOK UNIVERSITY, DEPARTMENT OF ANTHROPOLOGY, November, 2008. Invited speaker. "The complex dynamics of male chimpanzee relationships".
- EVOLUTION OF SOCIAL PSYCHOLOGY CONFERENCE, Yale University, November, 2008. Invited speaker. "Third-party interventions in wild chimpanzees: Flexible strategies and their implications for social cognition".
- UCLA DEPARTMENT OF ANTHROPOLOGY, February, 2008. Invited speaker. "Hunting and meat sharing among wild chimpanzees: implications for human evolution".
- THE UNIVERSITY OF MASSACHUSETTS, BOSTON, November, 2007. Guest lecturer. "Simple explanations for cooperation in wild chimpanzees". ANTH 425, "Cooperation and Conflict".
- THE MIND OF THE CHIMPANZEE CONFERENCE, March, 2007. Invited speaker. "Does cognitive ability separate chimpanzees from social carnivores?"
- AMHERST COLLEGE BIOLOGY DEPARTMENT, October, 2006. Invited speaker. "Ecological and social influences on hunting by wild chimpanzees".
- INTERNATIONAL PRIMATOLOGICAL SOCIETY PRECONGRESS WORKSHOP ON CHIMPANZEE SOCIAL INTELLIGENCE, June, 2006. Invited speaker. "Do the Gombe chimpanzees cooperate to hunt and share meat?"
- YALE UNIVERSITY ANTHROPOLOGY DEPARTMENT, November, 2005. Invited speaker. "Hunting and meat sharing among the Gombe chimpanzees".
- DARTMOUTH COLLEGE DEPARTMENT OF BIOLOGICAL SCIENCES, November, 2005. Invited speaker. "Ecological and social influences on hunting and meat sharing among wild chimpanzees".
- CHIMPANZEE SSP CARE AND MANAGEMENT WORKSHOP, June, 2005. Invited speaker. "Natural history of the common chimpanzee, *Pan troglodytes*".
- HAMLIN UNIVERSITY BIOLOGY DEPARTMENT, December, 2004. Invited speaker. "Hunting and meat sharing among wild chimpanzees: Simple explanations for complex phenomena".
- CARLETON COLLEGE BIOLOGY DEPARTMENT, November, 2003. Invited speaker. "Hunting and meat sharing among wild chimpanzees: Costs, benefits and decision making".

CONFERENCE PRESENTATIONS (*indicates podium presentation)

- ***Gilby, I.C.** 2011. Consequences of alpha male chimpanzee dominance strategies. 80th Annual Meeting of the American Association of Physical Anthropologists. American Journal of Physical Anthropology 144 (S52): 141.
- ***Gilby, I.C.** 2010. Alpha male chimpanzees at Gombe: Consequences of dominance style. 23rd Congress of the International Primatological Society.
- ***Gilby, I.C.**, Wilson, M.W., Mohlenhoff, K.A., Pusey, A.E. 2009. The function of coalitionary aggression among wild chimpanzees. 78th Annual Meeting of the American Association of Physical Anthropologists. American Journal of Physical Anthropology 138 (S48): 133.
- ***Gilby, I.C.**, Murray, C.M., Mane, S.V., & Pusey A.E. 2008. Solitary space use in male chimpanzees: inheritance of maternal range and avoidance of feeding competition. 77th Annual Meeting of the American Association of Physical Anthropologists. American Journal of Physical Anthropology 135 (S46): 103-104.
- ***Gilby, I.C.** 2007. Chimpanzees do not trade meat for sex. 106th Annual Meeting of the American Anthropological Association.
- ***Gilby, I.C.** & Wrangham, R.W. 2007. Risk-prone hunting by chimpanzees increases during periods of high diet quality. 44th Annual Meeting of the Animal Behavior Society.
- Gilby, I.C.**, Pusey, A.E., & Wrangham, R.W. 2007. Hunting by chimpanzees at Kanyawara and Gombe: a test of the 'meat-for-allies' hypothesis. 76th Annual Meeting of the American Association of Physical Anthropologists. American Journal of Physical Anthropology 132 (S44): 114.
- ***Gilby, I.C.**, Wrangham, R.W., & Pusey, A.E. 2006. Temporal stability of cooperative alliances among male chimpanzees at Gombe and Kanyawara. 21st Congress of the International Primatological Society. International Journal of Primatology 27(S1): 163.

- ***Gilby, I.C.** 2005. Why do wild chimpanzees share meat? At Gombe, persistent beggars prevail. 42nd Annual Meeting of the Animal Behavior Society.
- ***Gilby, I.C.** 2005. The influence of social and ecological factors on hunting decisions of the Gombe chimpanzees. The New England Biological Anthropology Symposium.
- ***Gilby, I.C.** 2004. Meat or sex? A fresh look at hunting and meat sharing among the Gombe chimpanzees (*Pan troglodytes*), using 25 years of long-term data and new field observations. 27th Annual Meeting of the American Society of Primatologists. American Journal of Primatology 62 (S1): 71.
- ***Gilby, I.C.** 2000. Why do wild male chimpanzees share meat with females? One alternative to the 'Meat for sex' hypothesis. The Apes: Challenges for the 21st Century, Brookfield Zoo, Chicago, IL.

SERVICE

International Primatological Society Conservation Committee

AD-HOC REFEREE

American Journal of Physical Anthropology
American Journal of Primatology
Animal Behaviour
Animal Cognition
Anthropological Review
Behavioral Ecology
Behavioral Ecology and Sociobiology
Biology Letters
Current Anthropology
Ethology
Folia Primatologica
Functional Ecology
Journal of Comparative Psychology
Journal of Human Evolution
Primates
Proceedings of the Royal Society of London, Series B: Biological Sciences
Science

GRANT PROPOSAL REFEREE

The Leverhulme Trust
The Lincoln Park Zoo Science and Conservation Program
The L.S.B. Leakey Foundation
The National Science Foundation

PROFESSIONAL MEMBERSHIP

Animal Behavior Society
Sigma Xi, The Scientific Research Society
International Primatological Society
American Association of Physical Anthropologists
American Anthropological Association