

NGA NGUYEN
Director, Wildlife Endocrinology Lab &
Associate Research Curator
Conservation & Science
Cleveland Metroparks Zoo
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RESEARCH INTERESTS

Animal behavioral endocrinology, Social behavior, Development and reproduction

CURRENT POSITIONS

Associate Research Curator, Department of Conservation and Science, Cleveland Metroparks Zoo, Cleveland, OH. 2006-present.

Director, Zoological Endocrinology Laboratory, Cleveland Metroparks Zoo, Cleveland, OH. 2006-present.

EDUCATION

Princeton University, Dept. of Ecology & Evolutionary Biology, Princeton, NJ
Ph.D. September 2006. Dissertation Title: Endocrine Correlates and Fitness Consequences of Variation in the Mother-Infant Relationship in Wild Baboons (*Papio cynocephalus*) in Amboseli, Kenya. Advisor: Dr. Jeanne Altmann

Barnard College, Columbia University, New York, NY
B.A. Majors: Anthropology and Biology, 1999.

RESEARCH SUPPORT AND HONORS

Margot Marsh Biodiversity Foundation (2007: \$10,000)
Primate Conservation, Inc. (2006: \$2,000)
Cleveland Metroparks Zoo (2006: \$3,000)
Princeton University APGA Summer Travel Grant (2005: \$400)
L.S.B. Leakey Foundation Dissertation Research Grant (2002-03: \$12,000)
National Science Foundation Dissertation Improvement Grant (2002-03: \$12,000)
National Science Foundation Graduate Research Fellowship (2000-2005)
Barnard College Spiera Family Prize in Biology (2000: \$3,000)
Summer Research Grant, American Museum of Natural History (1998: \$3,000)
NSF Summer Research Experiences for Undergraduates Grant, Columbia University (1997: \$3,000)
NSF Summer Research Experiences for Undergraduates Grant, Bronx Zoo (1996: \$3,000)

PAPERS IN REFEREED JOURNALS

Nguyen, N., Gesquiere, L.R, Wango, E.O., Alberts, S.C., Altmann, J. Late pregnancy glucocorticoid levels predict responsiveness in wild baboon mothers (*Papio cynocephalus*) *Animal Behaviour* 75:1747-1756.

Fashing, P.J.; Mulindahabi, F.; Gakima, J.-B.; Masozera, M.; Mununura, I.; Plumptre, A.J.; **Nguyen, N.** 2007. Activity and ranging patterns of Angolan colobus (*Colobus angolensis ruwenzorii*) in Nyungwe Forest, Rwanda: Possible costs of large group size. *International Journal of Primatology* 28: 529-550.

Beehner, J. **Nguyen, N.**, Alberts, S.C., Altmann, J. 2006. The endocrinology of pregnancy and fetal loss in wild baboons. *Hormones and Behavior* 49:688-699.

Altmann, J.; Lynch, J.W.; **Nguyen, N.**; Alberts, S.C.; Gesquiere, L.R. 2004. Life-history correlates of steroid concentrations in wild peripartum baboons. *American Journal of Primatology* 64: 95 – 106.

Sterling, E.J.; **Nguyen, N.**; Fashing, P.J. 2000. Spatial patterning in nocturnal prosimians: a review of methods and relevance to studies of sociality. *American Journal of Primatology* 51:3-19.

Nguyen, N. 2000. A survey of Tonkin snub-nosed monkeys (*Rhinopithecus avunculus*) in northern Viet Nam. *Folia Primatologica* 71:157-160.

MANUSCRIPTS IN PREP.

Nguyen, N., Gesquiere, L., Alberts, S.C., Altmann, J. (in prep). Sex differences in the mother-infant relationship in wild baboons (*Papio cynocephalus*): Social and hormonal correlates. To be submitted to *Hormones & Behavior*.

Nguyen, N., Van Horn, R.C., Alberts, S.C., Altmann, J. (in prep). “Friendships” between new mothers and adult males: Adaptive benefits and determinants in wild baboons (*Papio cynocephalus*). To be submitted to *Behavioral Ecology & Sociobiology*.

Nguyen, N., Alberts, S.C., Altmann, J. (in prep). Birth intervals in wild baboons (*Papio cynocephalus*): The effects of rank, suckling intensity and ovarian steroids. To be submitted to *Behavioral Ecology & Sociobiology*.

FIELD RESEARCH EXPERIENCE

Research on the behavioral ecology, endocrinology, and conservation biology of wild gelada monkeys (*Theropithecus gelada*) at Guassa, Menz Highlands, north-central Ethiopia, in collaboration with Dr. Peter Fashing of the Pittsburgh Zoo. Dec 2005 – Feb 2006; Nov 2006 – Apr 2007, Apr 2008-Jun 2008.

Research on the causes and consequences of variation in the mother-infant relationship in five long-term study groups of wild yellow baboons in the Amboseli Baboon Research Project population in the Amboseli basin, southern Kenya. Jul 2002 – Nov 2003.

FIELD RESEARCH EXPERIENCE (continued)

Research on the behavior and ecology of wild Angolan black and white colobus (*Colobus angolensis*) & gray-cheeked mangabeys (*Lophocebus albigena*) in the Nyungwe Forest, Rwanda in collaboration with Dr. Peter Fashing of the Wildlife Conservation Society, Bronx Zoo. Apr – May 2000.

Research on the status and distribution of two species of critically endangered leaf monkeys (*Trachypithecus francoisi*, *Rhinopithecus avunculus*) in two protected tropical forests in northern Viet Nam in collaboration with Fauna & Flora International Indochina. Jun – Dec 1998.

Assistant to Dr. Marina Cords, Columbia, University, NY in research on patterns of reproductive and social behavior in wild blue monkeys (*Cercopithecus mitis*) in the Kakamega Forest, western Kenya. Jun – Sep 1997.

LABORATORY RESEARCH EXPERIENCE

Development, optimization and validation of methods for the extraction and analysis of steroid hormones (glucocorticoids, estrogens, progesterone, testosterone) from feces from a diversity of wildlife species, including captive gelada baboons, using radioimmunoassay (RIAs) and enzymeimmunoassays (EIAs) in Dr. Steve Monfort's Reproductive Endocrinology Laboratory at the Center for Research & Conservation, Smithsonian National Zoological Park, Front Royal, VA. Jun – Oct 2006.

Analysis of perinatal fecal steroid hormones (glucocorticoids, estrogens, progesterone, testosterone) and their relationship to individual-based patterns of variation in mother-infant interactions in wild yellow baboons in Amboseli, Kenya using radioimmunoassay (RIAs) in Dr. J. Altmann's Endocrine Laboratory, Princeton University, Princeton, NJ. Jan – Aug 2005.

Assisted Dr. Jessica Lynch in populational analyses of fecal steroid hormones and their life history correlates in perinatal Amboseli baboons in Dr. J. Altmann's Endocrine Laboratory, Princeton, NJ. Jan – Jun 2002.

Assisted Dr. Memuna Khan in the development and validation of RIAs for the analysis of fecal estrogens and progesterone in the Amboseli baboon population in Dr. J. Altmann's Endocrine Laboratory, Princeton, NJ. Jan – Jun 2001.

Molecular genetic analysis of patterns of variation in the serotonin transporter gene promoter region in the Amboseli baboon population in Dr. S. Alberts's Genetics Laboratory, Duke University, Durham, NC. May – Sep 2001.

Assisted Dr. Bea Perez-Sweeney in molecular genetic analyses of patterns of microsatellite variation between and within populations of the critically endangered Brazilian black lion tamarin (*Leontopithecus chrysopygus*) in Dr. D. Melnick's Population Genetics Laboratory, Columbia University, NY. Sep 1999 – May 2000.

LABORATORY RESEARCH EXPERIENCE (continued)

Assisted Dr. Christine Sheppard of the Bronx Zoo, NY in analyses of morphometric variation in over 50 pheasant species in the collections at the American Museum of Natural History, NY. Sep 1996 – May 1997.

Examination of patterns of variation in the social behavior of two related species of storks, the common marabou stork (*Leptoptilos cruminiferus*) and the endangered lesser adjutant stork (*L. javanicus*), in captivity at the Bronx Zoo, NY. Jun – Sep 1996.

TEACHING EXPERIENCE

Teaching assistant, Evolution, Dr. Peter Grant, Princeton University, Spring 2002, led class discussions of readings from the primary literature, graded exams.

Teaching assistant, Natural History of Mammals, Dr. Daniel Rubenstein, Princeton University, Fall 2001, assisted in student research projects, graded exams.

Teaching assistant, Laboratory in Introductory Biology, Dr. James Gould, Princeton University, Fall 2000, organized and supervised demonstrations and student experiments, administered and graded exams.

Teaching assistant, Laboratory in Plant Physiology, Dr. Philip Ammirato, Barnard College, Spring 2000, organized and supervised student experiments, administered and graded exams.

MEETINGS ABSTRACTS

Fashing, P.J. and **Nguyen, N.** (2006) A preliminary study of gelada ranging patterns and habitat use in the Menz Highlands, Ethiopia. *American Journal of Primatology* 68(S1): 147.

Nguyen N, Gesquiere L, Alberts SC, (2006) Endocrine and social sources of variation in the mother-infant relationship in wild baboons in Amboseli, Kenya. *American Journal of Primatology* 68: 139-140.

Nguyen, N., Gesquiere, L., Alberts, S.C., Altmann, J. (2005) Late pregnancy glucocorticoid hormones predict maternal responsiveness in wild baboons (*Papio cynocephalus*). Supplement to the Monkeys: Old and New conference, New York Consortium in Evolutionary Primatology, New York, NY.

Nguyen, N. (2004) Endocrine correlates of variation in mothering behavior in wild yellow baboons in Amboseli, Kenya. Supplement to the International Primatological Society meetings, Torino, Italy.

Fashing, P.J., Plumptre, A.J., Mulindahabi, F., Gakima, J.B., Masozera, M., Munanura, I., and **Nguyen, N.** (2004) Ranging patterns of an unusually large *Colobus angolensis* group in Nyungwe Forest, Rwanda. Supplement to the International Primatological Society meetings, Torino, Italy.

INVITED SEMINARS

Kent State University, Department of Anthropology, Kent, OH, 2007

Case Western Reserve University, Department of Biology, Cleveland, OH, 2007

Smithsonian Institution, Conservation & Research Center, Front Royal, VA, 2006

Cleveland Metroparks Zoo, Cleveland, OH, 2006

REFERENCES

Dr. Jeanne Altmann, Professor, Department of Ecology & Evolutionary Biology, Guyot Hall,
Princeton University, Princeton, NJ 08544. Phone: (609) 258-3814. E-mail: altj@princeton.edu

Dr. Michaela Hau, Assistant Professor, Department of Ecology & Evolutionary Biology, Guyot Hall,
Princeton University, Princeton, NJ 08544. Phone: (609) 258-3508. E-mail: hau@princeton.edu

Dr. Daniel Rubenstein, Professor & Department Chair, Department of Ecology & Evolutionary
Biology, Guyot Hall, Princeton University, Princeton, NJ 08544. Phone (609) 258-5698. E-mail:
dir@princeton.edu