

**CURRICULUM VITAE ET STUDIORUM**

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**PERSONAL INFORMATION**

**Name:** SHELLY MASI  
**Date of birth:** 14 May 1977 **Nationality:** Italian  
**Current position:** Associate/Assistant Professor (*Maître de conférences*) du Muséum national d'Histoire naturelle  
**Address:** Musée de l'Homme, UMR 7206- Éco-anthropologie et Ethnobiologie, 17 place Trocadéro, 75116 Paris, France  
**Telephone:** Tel +33 1 44 05 73 02 **E-mail:** [masi@mnhn.fr](mailto:masi@mnhn.fr)  
**Knowledge of languages:** Italian (mother tongue), English, French, Sango (Central African Republic language); basic competence: Ba'Aka pygmy language, German, Spanish.

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**A SNAPSHOT**

Since 2000, I have been carrying out long term field research on the feeding socioecology of wild western gorillas in different African Countries, particularly in the Dzanga-Ndoki National Park in Central African Republic (CAR). I spent several years in the forest collecting data on gorilla behaviour for my master thesis (University of Rome "La Sapienza", Italy), my PhD in Ecology (Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany, and University of Rome "La Sapienza") and for my post-docs all based on long yearly field stays in the field. Since 2013 I am Associate/Assistant Professor (*Maître de conférences*) at the National Museum of Natural History (MNHN) in Paris, France. My current research aims at understanding the flexibility of foraging strategies and of the cognitive behaviour of great apes focusing on four main research lines: 1) animal nutritional and energetic needs, 2) feeding ecology and nutritional strategies in relation to spatio-temporal availability of food, 3) health status and medicinal plant choice, 4) feeding traditions, social learning, feeding knowledge transmission and culture. My field work profits from the tight collaboration with the Aka pygmies, hunter-gathers, forest experts and gorilla trackers, for whom I had to learn the Central African language to be able to communicate and work together. A recent research line of mine includes studies on the Aka pygmies given their intriguing hunter-gather life style and their traditional use of forest plants for medicine and other usages. My research has been focussing mainly on the western gorillas, elusive and critically endangered species. However, I strongly believe that the comparative approach among species, including humans, and especially among disciplines, is the only way to fully address our research questions. Therefore, today thanks to a large network of strong national and international collaborations, my research framework compares different primate species (including humans) integrating field, captive and experimental research with a multidisciplinary approach (e.g. socioecology, feeding ecology, cognition, spatial geography, health, conservation, physiology, botany, anthropology, ethnology, genetic, neurocognition). Focusing on primates and particularly on our closest relatives, the great apes, the ultimate goal of my research is to shed light a) on resilience of endangered species to aid their conservation, and b) to the evolutionary roots of different aspects of human evolution (e.g. origin of food/plant selection, origin of culture, origin of skilled cognition, origin of future planning, origin of traditional medicine, origin of language and hand preference, origin of diseases).

**ACADEMIC STUDIES**

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**Dates:** October 2003 – March 2008  
**University/Institution:** University of Rome "La Sapienza", Rome, Italy and Max Planck Institute (MPI) for Evolutionary Anthropology, Leipzig, Germany  
**Title awarded:** PhD in ecology. Title thesis: Seasonal influence on foraging strategies, activity and energy budgets of western gorillas (*G. gorilla*) in Bai Hokou, Central African Republic (CAR). Supervisor at the University of Rome "La Sapienza", Prof. L. Boitani (Depart. of Animal and Human Biology), at the MPI, Dr. M. Robbins (Depart. of Primatology).  
**Dates:** 1996-2003  
**University/institution/school:** University of Rome "La Sapienza", Rome, Italy  
**Title awarded:** Honours degree in Biology (Masters second degree equivalent): 110/110 *cum*

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*laude*. Degree dissertation titled: Tree use by a western gorilla group (*G.g.gorilla*) at the Dzanga-National Park, CAR. Supervisor: Prof. Luigi Boitani.

### POST-DOCS

- January 2011-July 2012: ANR JC SAFEAPE at MNHN, Paris, France
- April 2010-December 2010: MNHN, Paris, France
- January 2008-December 2009: CNRS at MNHN, Paris, France

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### FIELD EXPERIENCE: AFRICA

- December 2000 to November 2001: Central African Republic, CAR, Dzanga-Ndoki National Park (Bai-Hokou), Collaboration with the WWF and master2 data collection on tree use and feeding ecology of habituated western gorillas.
- August 2004 to December 2005: CAR, Dzanga-Ndoki National Park (Bai-Hokou), Collaboration with the WWF and PhD data collection on foraging strategies of habituated western gorillas.
- July 2006: Uganda, Bwindi Impenetrable National Park (Ruhija, Kabale), "Institut de Conservation Forestière Tropicale", visit the Ruhija research Centre and the mountain gorillas, filed observations on differences with western gorillas.
- July 2006 : Rwanda, Volcanoes National Park (Karisoke, Ruhengeri), Dian Fossey International Gorilla Funds visit with Dr V. Vecellio and Dr K. Fawcett to Karisoke research centre and the mountain gorillas, comparison with western gorillas.
- March 2008-July 2008 and November 2008-April 2009: CAR, Parc National Dzanga-Ndoki (Bai-Hokou), Collaboration with the WWF and post-doc data collection on health and ontogeny of western gorilla plant choice in one habituated group.
- January 2010: Uganda, Kibale National Park (Kanyawara and Sebitoli), « Projet pour la Conservation la des Grands Singes », visit the research sites of Kanyawara and Sebitoli and of the two chimpanzee communities, field data collection and observations of feeding behaviour and health monitoring to compare with western gorillas.
- March-April 2011: : Central African Republic, Dzanga-Ndoki National Park (Bai-Hokou and Mongambe), collaboration with WWF, field work and training of one PhD student on data collection of activity, diet, health of habituated gorillas.
- July 2013: Cameroun, Campo-Ma'an National Park expert mission for WWF to evaluate the gorilla habituation program.
- November 2013: Democratic Republic of Congo (Nkala and Manzano), visit the WWF research centre and the habituated communities of bonobos, filed observations on differences with western gorillas.
- Avril-Mai 2014: Republic of Congo, Nouable-Ndoki National Park (Mondika), field work and training of two post-docs on field work and data collection of activity, diet, food processing in two habituated groups of western gorillas.
- Mai-June 2016: CAR, Dzanga-Ndoki National Park (Bai-Hokou and Mongambe), field work and training of two master students and one post-doc on data collection of activity, diet, ranging, and spatial foraging in 3 habituated western gorillas.

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**FELLOWSHIPS/GRANTS/AWARD** 13

**CONGRESS CONFERENCE TALKS** 24 (of which 7 invited)

**OFFICIAL INVITED TALKS GIVEN IN INSTITUTIONS** 32

**TEACHING AND TUTORIAL EXPERIENCE** Lecturing and supervising undergraduate, master and PhD students, and post-docs. Last academic year (2015-2016): 1 Post-doc, 1 PhD student, two master2 students, and co-supervising four undergraduat students and one master1 student.

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### ADMINISTRATIVE RESPONSABILITIES

- Elected Vice-President of the Scientific Council and Administration of the *Société Francophone de Primatologie*.
- Co-coordinator for the *Muséum National d'Histoire Naturelle* of the Project Minor/Major for undergraduate (three years) teaching at Sorbonne Universities (SU) (2014-2015-2016).
- Elected member rappresenting the Assistant/Associated Professors and Researchers in the UMR 7206 at Human, Nature, Society Department of the *Muséum National d'Histoire Naturelle*.
- Invited Member of the Scientific Council of the European Federation for Primatology and the *Balcon de Science of Musée de l'Homme*.

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## **MEDIA AND PUBLIC DIFFUSION**

- Scientific commissary for the exposition “*Sur la piste des Grands Singes*” at the *Grand Galerie de l’Evolution* at *Muséum National d’Histoire Naturelle* (2015 February the 11<sup>th</sup> to 2016 March 18<sup>th</sup>).
  - Scientific advisor and main guide into a documentary for the Italian national television “*Missione Natura, La Sette*” (2009), scientific advisor for a BBC documentary on gorillas (2008), scientific advisor and main guide into a documentary of the French television “*France 4*” (in progress), and participation into a documentary of the French television “*Ushuaia*” (in progress) and a German documentary (2001).
  - >70 International and national interviews for press (France, International), radio (France) and TV (France and Italy).
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## **PUBLICATIONS**

### **International peer-reviewed:**

- ❖ Robbins, M.M., Ando, C., Fawcett, K., Grueter, C.C., Hedwig, D., Iwata, Y., Lodwick, J., **Masi, S.**, Salmi, R., Stoinski, T. S., Todd, A., Vercellio, V., Yamagiwa, J., 2016. Behavioural Variation in Gorillas: Evidence of Potential Cultural Traits. *PLoS ONE* 11(9): e0160483. doi:10.1371/journal.pone.0160483
- ❖ Buyck, B., Hosaka, K., **Masi, S.**, Hofseter, V. 2016. Molecular analyses of first collections of *Elaphomyces* Nees (*Elaphomycetaceae, Eurotiales, Ascomycota*) from Africa and Madagascar indicate that the current concept of *Elaphomyces* is polyphyletic. *Cryptogamie, Mycologie*, 37 (1): 3-14
- ❖ **Masi, S.**, Mundry, R., Cipolletta C., Ortmann, S., Boitani, L., Robbins, M.M. 2015. The Influence of Seasonal Frugivory on Nutrient and Energy Intake in Wild Western Gorillas, *PLoS ONE* 10(7): e0129254. doi:10.1371/journal.pone.0129254
- ❖ **Masi, S.**, Bouret, S., 2015. Odor signals in wild western lowland gorillas: an involuntary and extra-group communication hypothesis, *Physiology & Behavior* 145 (2015) 123–126
- ❖ Krief, S., Cibot, M., Bortolamiol, S., Seguya, S., Krief, J.M., **Masi, S.**, 2014. Wild chimpanzees on the edge: exceptional nocturnal crop-raiding. *PLoS ONE* 9(10):e109925. doi:10.1371/journal.pone.0109925
- ❖ Fünfstück, T., Arandjelovic, M., Morgan, D., Sanz, C., Breuer, T., Stokes, E.J., Reed, P., Olson, S., Cameron, K., Peeters, M., Kuehl, H.S., Cipolletta, C., Todd, A., **Masi, S.**, Doran-Sheehy, D.M., Bradley, B., Vigilant, L., 2014. The Genetic Population Structure of Wild Western Lowland Gorillas (*Gorilla gorilla gorilla*) Living in Continuous Rain Forest, *American Journal of Primatology*, 76(9): 868–878
- ❖ **Masi, S.**, Asselain, N., Robelin, L., Bourgeois, A., Hano, C., Dousseau, G., Saint Jalme, M., Krief, S. 2013. Response to bitter taste in primates: role of sociality and diet, *Cognitive, Affective, & Behavioral Neuroscience*, 13(4): 916-929, DOI: 10.3758/s13415-013-0171-9
- ❖ Morton, B., Todd, A.F., **Masi, S.**, 2013. Monitoring health status in habituated western gorillas at Bai Hokou, Central African Republic: lessons learned and recommendations for protocol improvement, *Folia Primatologica*, 84:118–133, DOI: 10.1159/000350916
- ❖ **Masi, S.**, Chauffour, S., Todd, A., Bain, O., Guillot, J. & Krief, S. 2012. Factors affecting health and intestinal parasite load in wild western gorillas., *PLoS ONE*, 7(12): e49805. doi:10.1371/journal.pone.0049805
- ❖ **Masi, S.**, Gustafsson, E., Jalme, M. S. Narat, V., Todd, A., Bomsel, M.C., Krief, S. 2012. Unusual feeding behaviour in great apes, a window to understand origins of self-medication in humans: role of sociality and physiology on learning process, *Physiology & Behaviour*, 105 (2) 337–349
- ❖ **Masi, S.**, 2011. Differences in gorilla nettle-feeding between captivity and the wild: local traditions, species typical behaviours or merely the result of nutritional deficiencies? *Animal Cognition*, 14:921–925
- ❖ **Masi, S.**, Narat, V., Todd, A., Krief, S. 2011. How do great ape acquire information on unusual feeding behaviors? Role of sociality and physiology on learning process to understand origins of self-medication in humans. *Journal of Biological Research*, 1(LXXXIV): 293-296
- ❖ Guillot, J., Vermeulen, B., Lafosse, S., Chaffour, S., Cibot, M., Narat, V., **Masi, S.**, Nieguitila, A., l’Hostis, M., S nounou, G., Bain, O., Krief, S. (2011) Nematodes of the genus *Oesophagostomum*: an emergent risk for humans and apes in Africa? *Bulletin de l’Académie Nat. de Médecine*, 195(8): 1955-1963
- ❖ **Masi, S.**, Cipolletta, C., Robbins, M.M. 2009. Western lowland gorillas (*Gorilla gorilla gorilla*) change their activity patterns in response to frugivory, *American Journal of Primatology*, 71: 91-100

### **Under review:**

- ❖ Devaine, M., San-Galli, A., Trapanese, C., Bouret, S., St Jalme, M., Hano, **Masi\*, S.** Daunizeau\*, C.J., (in revision) Fool or be fooled: brain volume predicts the sophistication of Theory of Mind in primates,

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### *PLOS Computational Biology*

- ❖ Simmen, B., Pasquet, P., **Masi, S.**, Koppert, GJA, Wells, JCK., Hladik, CM. (in revision) Primate energy input and the evolutionary transition to cooked foods in humans, *PRS B*
- ❖ Goh, C., Saunders, E., Blanchard, M.L., **Masi, S.**, Redmond, I., Thorpe, S., Crompton, R. . (in revision) The role of habitat structure in the locomotor repertoire of captive and wild gorillas, *American Journal of Primatology*
- ❖ Robira, B., Pouydebat, E., San-Galli, A., Meulman, E.J.C., Aubaile, F., T. Breuer, **Masi, S.**, Hand preference in gestural communication and on food and tool manipulation in hunter-gather Aka pygmies from Central Africa Republic, *Journal of Human Evolution*

### **Other International journals:**

- ❖ **Masi, S.** 2010. Western Gorilla Conservation and Research in Bai Hokou - Central African Republic, *Gorilla Journal*, 40: 19-22
- ❖ **Masi, S.** 2009. Habituation, ecotourism and research for conservation of western gorillas in Central African Republic – Bai Hokou, *Gorilla Gazette*, 21(1): 31