

STATE OF NEW YORK
SUPREME COURT COUNTY OF FULTON

In the Matter of a Proceeding under Article 70 of
the CPLR for a Writ of Habeas Corpus,

THE NONHUMAN RIGHTS PROJECT, INC.,
on behalf of TOMMY,

Petitioners,

v.

PATRICK C. LAVERY, individually and as an
officer of Circle L Trailer Sales, Inc., DIANE
LAVERY, and CIRCLE L TRAILER SALES,
INC.,

Respondents.

**AFFIDAVIT OF
CHRISTOPHE BOESCH**

Index No.:

FEDERAL REPUBLIC OF GERMANY)
FREE STATE OF SAXONY) ss :
CITY OF LEIPZIG)

Christophe Boesch being duly sworn, deposes and says:

Introduction and Qualifications

1. My name is Christophe Boesch. I received a Maturite scientifique from College Calvin, Geneve in 1970, a Diplome de biologiste from the University of Geneva, Switzerland in 1975, and a Ph.D. from the University of Zurich, Switzerland in 1984. I work and reside in Leipzig, Germany.

2. I submit this affidavit in support of Petitioners The Nonhuman Rights Project, Inc. ("NhRP"), on behalf of Tommy, for a writ of habeas corpus. I am a non-party to this proceeding.

3. I am currently an Honorary Professor in the Department of Zoology at the University of Leipzig, Germany where I have been a member of the faculty for 14 years. I am also the Director of the Max Planck Institute of Evolutionary Anthropology, and Founder and President of the Wild Chimpanzee Foundation. I have directed 16 diploma theses, 24 Ph.D. theses for both European and American students, and the post-doctoral work for 8 students. I have also regularly taught classes in Behavioural Ecology, Evolutionary Biology, and Population Biology in the 22 years that I have been teaching.

4. I have twice been awarded the Great Apes Fellowship of the Leakey Foundation in Pasadena, California. In addition, I received the Prix Cortaillod for talented Swiss scientists under 35 years old from the University of Neuchâtel, Switzerland, and was awarded the Medal "Officier de l'Ordre National" by the president of Côte d'Ivoire Alassane Ouattara in 2013.

5. I have been a member of the International Primate Protection League, the IUCN/SSC Primate Specialist Group, and the International Primatological Society since 1986. I am also currently a member of: (1) the Behavior and Brain Sciences Associates (since 1991); (2) the Pan Africa News Editorial Board (since 1997); (3) Steering Committee of the World Heritage Species Status Taskforce (since 2002); and (4) the IUCN/SSC/ Section of the Great Apes (since 2003). Additionally, I am the Co-chairman of the Scientific Committee of the Great Apes Survival project of the UNEP/UNESCO (since 2003). I previously served as a: (1) scientific board member of the Fyssen Foundation, Paris (1985-1989); (2) consultant to the World Wide Fund for Nature International (1987-1988); (3) Project Coordinator for the World Wide Fund for Nature International in the Taï National Park, Ivory Coast (1988-1992); (4) executive council member of the Committee for the Care and Conservation of Chimpanzee (1988-1992); and (5) member of the Society for the study of Animal Behaviour (1993-1998).

6. During my career, I have served as a grant reviewer for the following institutions and foundations: NIH, National Science Foundation (USA), Swiss National Science Foundation, Leakey Foundation, National Geographic Society, Fulbright Foundation, and Wenner-Gren Foundation. Additionally, I have served as an ad hoc reviewer for a number of prominent peer-reviewed journals including: *Behavioural and Brain Sciences*, *Animal Behaviour*, *Nature*, *Behaviour*, *Ethology*, *Primates*, *International Journal of Primatology*, *American Journal of Primatology*, *Folia Primatologica*, *American Journal of Physical Anthropology*, *Current Anthropology*, *Behavioural Ecology*, *Proceedings of the National Academy Science, Series B*, *Quarterly Review of Biology*, *American Naturalists*, *Journal of Human Evolution*, *Proceedings of the Royal Society: Biological Sciences*, and *Journal of Evolutionary Biology*.

7. I have specialized in the study of wild chimpanzees for approximately 35 years. In 1976, I spent 8 months in the Taï National Park, Ivory Coast conducting a preliminary study on the behaviour of wild chimpanzees. I have completed on-going studies of these chimpanzees since 1979. My research on these chimpanzees has principally focused on ecology, social organisation, tool-use, hunting, cooperation, food-sharing, inter-community relationships and cognitive capacities. I also conducted a comparative field study on the chimpanzees of Gombe Stream National Park, Tanzania in 1990 and 1992 (April to July). Then in 1999 (August to October), I undertook a comparative field study on the chimpanzees of the Mahale Mountains National Park, Tanzania.

8. I have authored or co-authored 14 books on primate behavior, cognition, and evolution. Some of the most relevant include: (1) *Tool Use in Animals - Cognition and Ecology* (2013, Cambridge: Cambridge University Press); (2) *Wild Cultures: A Comparison between Chimpanzee and Human Cultures* (2012, Cambridge: Cambridge

University Press); (3) *The Real Chimpanzee: Sex Strategies in the Forest* (2009, Cambridge: Cambridge University Press); (4) *Feeding Ecology in Apes and Other Primates* (2006, Cambridge: Cambridge University Press); (5) *Regional Action Plan for Chimpanzees and Gorillas in West Equatorial Africa* (2005, Washington: Conservation International); (6) *Behavioural Diversity in Chimpanzees and Bonobos* (2002, Cambridge: Cambridge University Press); and (7) *The Chimpanzees of the Tai Forest: Behavioural Ecology and Evolution* (2000, Oxford: Oxford University Press).

9. Since 1978, I have published at least 215 articles on the cognitive and learning capabilities, intelligence, communication, or language skills of apes and chimpanzees specifically. These articles are published in many of the in the world's most-cited peer-reviewed scientific journals, including: *Science*, *Nature*, *Journal of Comparative Psychology*, *Conservation Biology*, *American Journal of Primatology*, *International Journal of Primatology*, *Ecology and Evolution*, *Animal Behaviour*, *Journal of Human Evolution*, *American Journal of Physical Anthropology*, *Journal of General Virology*, *Folia Primatologica* (the official journal of the European Federation for Primatology), *Biological Conservation*, *Molecular Ecology*, and *Natural History*. I have also published articles in *The Oxford Handbook of Comparative Evolutionary Psychology*, *Proceedings of the National Academy of Sciences* and in *Proceedings of the Royal Society B*. Several articles of mine have also appeared in *BBC Wildlife Magazine*. Specific topics of these publications include: ecology and cognition of tool use in chimpanzees, chimpanzee culture, meat eating and hunting specialization in chimpanzees, botanical skills in chimpanzees, long-term spatial memory in chimpanzees, chimpanzee conservation, female gregariousness in chimpanzees, social behavior and cognition in primates, habitat use and competitive exclusion among sympatric chimpanzee, gorilla and elephant, cultural differences between neighboring chimpanzee communities, reciprocity

and trades in wild chimpanzees, locomotion and tool-use in chimpanzees, altruism in forest chimpanzees, adoption in chimpanzees, paternity and social rank in wild chimpanzees, feeding competition in chimpanzees, male aggression and sexual coercion in chimpanzees, reciprocation of grooming in chimpanzees, vocal, gestural and locomotor responses of wild chimpanzees to intruders, chimpanzee population size, social bonds in chimpanzees, sophisticated Euclidean maps in forest chimpanzees, integration of chimpanzee and human culture, wild ape health, infant mortality cycles in chimpanzees, sexual swelling cycles in chimpanzees, food choice in chimpanzees, paternity in wild chimpanzees, locomotor behavior in chimpanzees, cooperative hunting in chimpanzees, bisexually-bonded ranging in chimpanzees, group-specific calls in chimpanzees, effects of community size on wild chimpanzees social organization, decision-making in conflicts of wild chimpanzees, mortality rates in chimpanzees, female reproductive strategies, buttress drumming by wild chimpanzees, innovation in wild chimpanzees, predator-prey systems in chimpanzees, nut cracking in wild chimpanzees, handedness in chimpanzees, symbolic communication in wild chimpanzees, teaching in wild chimpanzees. My Curriculum Vitae fully sets forth my educational background and experience and is annexed hereto as "Exhibit A".

Basis for Opinions

10. The opinions I state in this Affidavit are based on my professional knowledge, education, training, and 35 years of research and field work with chimpanzees, as well as my knowledge of peer-reviewed literature about primatology published in the world's most respected journals, periodicals and books that are generally accepted as authoritative in the field of primatology, many of which were written by myself and colleagues with whom I have worked for many years and with whose research and field

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work I am personally familiar. A full reference list of peer-reviewed literature cited herein is annexed hereto as "Exhibit B".

Opinions

11. Scientific knowledge about chimpanzees is vast and has been increasing at an exponential rate. We must therefore be aware that what we know now is still only a small fraction of what chimpanzees are capable of. Here I discuss several areas particularly relevant as evidence of the autonomous nature of chimpanzees.

A. Foreplanning and Episodic Memory: Components of an Autobiographical Self

12. Self-aware, autonomous individuals understand that they exist through time, that is, they have an autobiographical self. This level of awareness makes it possible to recollect past events and plan for the future. Chimpanzees clearly possess an autobiographical self, as they are able to prepare for the future (Beran et al., 2004; Mulcahy and Call, 2006; Osvath, 2009; Osvath and Osvath, 2008) and can remember highly specific elements of past events over long periods of time (Janmaat et al., 2013a, b; Martin-Ordas et al., 2013; Normand and Boesch, 2009; Normand et al., 2009)

13. A wealth of experimental evidence shows that chimpanzees plan for the future. For instance, in a sequential numbering task it was found that their performance was only explainable if the chimpanzees were planning their responses one step ahead (Beran et al., 2004). Also, they can select, transport and save appropriate tools for a task in the future (Mulcahy and Call, 2006; Osvath and Osvath, 2008). The planning for future use of tools and objects has not only been demonstrated experimentally, but has been documented in a long-term observational study of spontaneous tool use and innovation in a captive chimpanzee (Osvath, 2009). In this study, a male chimpanzee in a zoo collected and stowed away sharp stones in his display area for use as projectiles thrown at visitors (Osvath, 2009). The chimpanzee also engaged in deceptive behavior by stashing the

stones in a "calm manner" was not to be noticed (Osvath and Karvor 2012). Therefore, chimpanzees are not only able to mentally prepare for an upcoming event and alter the future but they are able to use intentional deception in the process. Intentional deception is a hallmark of the ability to take the perspective of and model mental states in others (de Waal, 2005).

14. Just as they can mentally run through steps in their mind to plan for future actions, chimpanzees can remember and mentally re-experience events in the past (also known as episodic memory). Several experimental studies demonstrate this capacity in chimpanzees (Martin-Ordas et al., 2010; 2013). For instance, chimpanzees can use information about tools they recall from an event that occurred only four times three years earlier (Martin-Ordas et al., 2013). They can also make complex decisions about which food items to choose based on perishability by keeping in mind two food items presented separately one hour apart (Martin-Ordas et al., 2013).

15. It is critical for chimpanzees living in a forest to retain knowledge of good sources of food using spatial memory. And it is particularly advantageous to remember which trees tend to yield an abundance of fruit. In an observational study of several female chimpanzees living in the Tai Forest in the Ivory Coast, my team discovered that, during their travels, they visited specific abundantly fruiting trees in a very deliberate and goal-directed manner, rather than through haphazard discovery. They clearly recalled the location of some of these trees for as long as three years. These visits were not initiated by visual cues or smell and occurred more often when females were foraging alone. These results strongly suggest that goal-directed monitoring is guided by a long-term "what and where" (episodic) memory of the location of good potential sources of fruit. (Janmaat et al., 2013a). In another study my team found evidence that the chimpanzees were using botanical features of the trees in their foraging plans. That is, they took advantage of the

timing of fruiting of different types of trees (e.g., making efficient direct lines to trees that were fruiting synchronously) and based their expectations of finding fruit on this botanical knowledge (Janmaat et al., 2013b). In another set of studies of foraging, my colleagues and I found that the chimpanzees knew precisely where they were going, were traveling in a straight line to reach food sources, and were aware of the distance they needed to walk. Moreover, the direction they started out in was exactly the direction needed to take them to their food source, suggesting that they were not meandering and using landmarks along the way but, rather, were depending on detailed spatial memories. They also returned to a food source from many different directions depending upon their starting point. (Normand and Boesch, 2009; Normand et al., 2009). These observations strongly suggest that, when foraging, the chimpanzees are using sophisticated Euclidean mental spatial maps based on long-term episodic memories (Normand and Boesch, 2009; Normand et al., 2009). These findings not only provide evidence of complex mental representational abilities in chimpanzees but also the use of long-term knowledge from specific memories within the context of an autobiographical sense of their own experiences over time.

B. Cultural Traditions

16. Culture depends upon several complex cognitive capacities, including significant behavioral flexibility and innovation, social learning, cumulative knowledge, and adherence to traditions. The evidence for these capacities in wild chimpanzees is robust and indisputable and our knowledge of the richness of their different cultures continues to grow. Chimpanzees possess widespread cultures that are found in all known populations and that distinguish them from other populations (Boesch, 2003, 2012; Whiten and Boesch, 2001; Whiten et al. 1999, 2001). Within the same forest, neighbor groups distinguish themselves with different cultural traits that are maintained over decades despite the exchange of females across groups. New immigrants adopt the

cultural traditions of the new group rapidly through social learning (Boesch, 2003, Luncz et al., 2012) allowing for the maintenance of continuity in different traditions within each group. They also show evidence of symbolic cultural traditions based on arbitrary gestures that have no direct connection with their meanings but are understood by all group members (Boesch, 2003; 2012). These characteristics of chimpanzee culture – diverse, innovative, group specific and even symbolic – point to the striking similarities in the cognitive mechanisms underlying chimpanzee and human culture.

C. Understanding of death

17. An understanding of death requires an ability to recognize the continuity of self and others through time. Self-recognition, which chimpanzees demonstrate, would be a requirement for understanding the irreversibility of death. Self-aware individuals, such as chimpanzees, seem to have an understanding of death as a kind of irreversible situation. They often respond with elaborate mourning rituals that demonstrate some understanding of the concept of life and its ending. Years of independent observations of wild chimpanzees in the Taï forest and elsewhere in Africa lead to the conclusion that chimpanzees realize dead individuals do not move and do not need help anymore, and that they will remain in that state. Once they come to this realization they enact behaviors which can be described as mournful, respectful, and almost-ritualistic (Boesch, 2012; Goodall, 1986). As an example, a 10-year old female, Tina, was mortally wounded by a leopard in the Taï forest. Upon seeing her, several individuals in the community surrounded her body. The alpha male and two high-ranking females inspected the body by sniffing the wound while others held her hand. The body was guarded by the males and the highest-ranking female. Infants and low-ranking adults were chased away. Others allowed near the body approached quietly. The only infant allowed to approach Tina's body was her son, Tarzan. The males, who never groom a juvenile female under normal

circumstances, spent an hour grooming her body. One of the males gently tapped Tina on the chin while looking in her eyes and shook her arm while looking at her face as if to confirm the death. After six hours all finally left in a silent procession (Boesch, 2012). In another observation at Gombe National Park, the deceased, an adult female, was visited in succession by other high-ranking members of the group while juveniles and lower-ranking members looked on but were kept from touching the body. Several individuals formed a tight circle around her corpse and the alpha males guarded her (Goodall, 1986). There is even evidence of covering the body with leaves and branches (Boesch, 2012). Altogether, numerous independent observations from different chimpanzee communities strongly suggest a complex group response unique to death involving guarding of the dead body for hours, helping orphans who remain close to their dead mothers, testing for a reaction by shaking the body, grooming the body but not licking blood or wounds as is usually done with injured individuals, showing signs of sorrow when leaving the body, showing signs of respect by keeping youngsters at bay, and, sometimes, carrying the corpse to a safe place. (Boesch, 2012 ; Boesch and Boesch-Achermann 2000). It is notable that chimpanzees distinguish between mortal wounds and other kinds of injuries. If the individual is still alive, other chimpanzees will sometimes clean the wound by licking it and removing debris. However, no one licks similar wounds of deceased individuals; they seem to understand that it will not do any good (Boesch, 2012). Another example of distress at the death of a friend and the realization that the individual is beyond help comes from one chimpanzee, Falstaff's, severe injury during a leopard attack and the response of his hunting partner and friend, Snoopy. Snoopy stayed with the immobile Falstaff for two hours even though the rest of the males of the community were moving on. Snoopy would walk a few steps and look behind him at Falstaff to see if he was following him. He then moved 200 meters north and drummed loudly and repeatedly on a large tree to apparently

communicate to Falstaff. When Falstaff did not answer Snoopy let out a loud distressed scream as he finally realized Falstaff was not coming and he had to move on (Boesch, 2012). In the case of mothers who lose an infant, although they may be hesitant to abandon the corpse, they do not behave towards their dead infants as they would if they were alive and they eventually leave them behind (Boesch, 2012). These and many other examples strongly indicate that chimpanzees faced with the death of a friend or family member will not immediately give up but, after several attempts, experience strong bouts of grief and distress as they come to the realization that the deceased is not coming back and the condition is irreversible. Their responses are, at the least, equivalent to the first stage of understanding of death - irreversibility - which human children pass through at about age five (Speece and Brent, 1984), which is well past the age of the emergence of self-recognition and during a period of developing theory of mind and empathy.

D. Empathy and Compassion

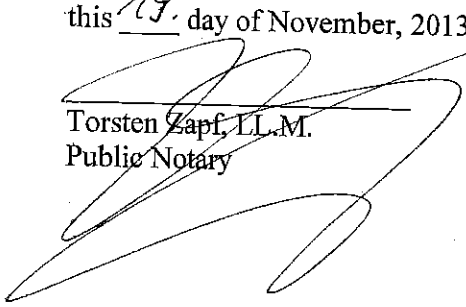
18. Empathy is the ability to put oneself in the situation of another perceptually and cognitively. It is only possible if one can adopt another's perspective. Empathy, and, in particular, compassion, require not only a sense of self but the ability to attribute feelings to others, i.e., to understand that someone else could be in a different state than you or could be feeling differently from you. Evidence from both captive and wild chimpanzees indicates that they are capable of highly developed empathic abilities (de Waal, 1990). I have observed clear instances of compassionate care and empathy among wild chimpanzees towards injured individuals. Moreover, responses to others' wounds are not based on simple learning rules because wound licking and tending are only done under specific circumstances, e.g., when the wounded individual is too weak to care for himself or when wounds are in hard-to-reach places. Wound tending is also done by individuals are not close family relatives of the injured. Finally, empathic tendencies vary across

chimpanzee individuals and populations. Wound-tending is quite common in the Taï forest chimpanzees. Saliva has a strong antiseptic property and its regular application to a fresh wound speeds up healing. Taï chimpanzees have been observed licking wounds on the injured feet of others and cleaning out a cut over an eye. Moreover, chimpanzees are aware of the intentions of another chimpanzees when being helped. I observed a female chimpanzee whose hand was trapped in a snare, extend her wounded hand to a male friend and sit still to allow him to remove the cables (Boesch, 2012). These and other examples are striking evidence for the chimpanzee empathy, compassion and recognition when someone else is trying to help them – all complex aspects of self-awareness.



Prof. Dr. Christophe Boesch
Director, Dept. of Primatology
Max Planck Institute for Evolutionary
Anthropology

Sworn to before me
this 13 day of November, 2013



Torsten Zapf, LL.M.
Public Notary



FileNo. 65/2013

The following notarial act is just a confirmation of signature.

I hereby certify that the above is the true signature, subscribed in my presence, of

Mr. Prof. Christophe Boesch

Date of Birth: 11-08-1951 in St. Gallen

adress: Bleichertstraße 2 in 04155 Leipzig

identified by his French Passport No. 13BC63470

Leipzig, 1/19/2013



Torsten Zapf, Notar



APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Land: **Bundesrepublik Deutschland**

Diese öffentliche Urkunde

2. Ist unterschrieben von **Herrn Zapf**

3. in seiner Eigenschaft als **Notar**

4. sie ist versehen mit dem Siegel des

Notars in Leipzig Torsten Zapf

Bestätigt

5. in **Leipzig**

6. am **21.11.2013**

7. durch **den Präsidenten des Landgerichts**

8. unter Nr. **910A-765/2013** **In Vertretung**

9. Stempel/Siegel

10. Unterschrift

Kai Deusing
Vizepräsident

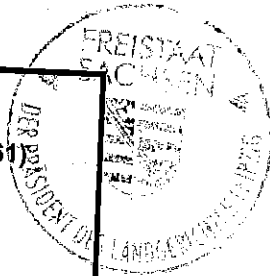


EXHIBIT A

Christophe Boesch CV

Personal

Date of Birth: 11-08-51 in St Gallen, Switzerland
Nationality: French and Swiss
Marital status: Married, two children (1983, 1988)
Languages: French, English, German

Education

Secondary school	1965-68: Lycée François Villon, Paris 1968-70: Collège Calvin, Genève degree: Maturité scientifique.
University of Geneva, Switzerland	1970-75: Faculty of Biology, Diplôme de biologiste, 1975: supervisor: Prof. Hans Huggel
University of Zürich, Switzerland	1979-1984: Department of Ethology and Wildlife Research Ph.D. degree, 1984: Title: "Nut-cracking behaviour of wild chimpanzees", supervisor: Prof. Hans Kummer.
University of Basel, Switzerland	Habilitation degree (Privat Dozent): 1994. supervisor: Prof. Stephen Stearns.

Professional experience

1973	3 months of census work on the Mountain Gorilla in the Virunga National Park, Rwanda. Supervised by Dr. Dian Fossey. This work was the basis of my diplom master thesis.
1975 and 1977	Teaching biology at a secondary school, Collège Moderne, in Geneva.
1976	8 months in the Taï National Park, Ivory Coast, for a preliminary study of the nut-cracking behaviour of wild chimpanzees and an evaluation of the feasibility of a long-term study.
1978	4 months assistant at the Department of Ethology and Wildlife Research (Prof. Hans Kummer) at the University of Zürich.
1979-ongoing	Long-term study of the wild chimpanzees in the Taï National Park in the Ivory Coast. Principal themes under study; ecology, social organisation, tool-use, hunting, cooperation, food-sharing, inter-community relationships, cognitive capacities.
1984-1990	Postdoctoral Research Associate at the Department of Ethology (Prof. Hans Kummer) at the University of Zurich.
1987-1989	4 months visit at the Department of Population Biology (Prof. Stephen Stearns), University of Basel.
1990 and 1992 (April to July)	Comparative field study on the chimpanzees of Gombe Stream National Park, Tanzania.
January 1991-September 1997	Assistant professor at the department of Population Biology (Prof. Stephen C. Stearns), University of Basel (Switzerland).
1995 Spring	Visiting Professor, University of Rennes, France.
1996 Spring	Visiting Professor, Ecole Normale Supérieure, Paris, France.

1997- ongoing	Director, Max Planck Institute of Evolutionary Anthropology in Leipzig, Germany.
1999 (August to October)	Comparative field study on the chimpanzees of the Mahale Mountains National Park, Tanzania.
1999- ongoing	Honorary Professor, Dept. of Zoology, University of Leipzig, Germany.
2000- ongoing	Founder and President of the Wild Chimpanzee Foundation.

Teaching experience

Directing field work of students:	Diplom thesis: 16 students of different European universities. Ph. D. thesis: 24 students from European and American universities. Post-doctoral work: 8 students from European universities.
Teaching at the University of Basel:	Spring 1991: Behavioural Ecology of Primates (2 hours per week). Winter semester (1991- 1997): Evolution, Ecology and Behaviour (4 hours per week). Behavioural Ecology and Sociobiology (2 hours per week). Seminar on Population Biology (1 hour per week). Summer semester (1992-1997): Field course in Population Biology (2 weeks). Field course in Evolutionary Biology (1 week)
Teaching at the University of Leipzig:	Summer semester (1999-ongoing): Behavioural Ecology (2 hours per week)

Offices and advisory work

- Fyssen Foundation, Paris, scientific board member (1985-1989)
- World Wide Fund for Nature International (WWF Int.): Consultant to negotiate with the Ivorian government a conservation project for the Taï National Park (1987-1988).
- World Wide Fund for Nature International: Coordinator project in the Taï National Park, Ivory Coast (1988-1992).
- Committee for the Care and Conservation of Chimpanzee (CCCC), executive council (1988-1992)
- Society for the study of Animal Behaviour, Member (1993-1998)
- IUCN/SSC Primate Specialist Group (1986-ongoing)
- International Primatological Society (1986-ongoing)
- International Primate Protection League (1986-ongoing).
- International Journal of Primatology, Editorial Board (1990-2004).
- Behavioral and Brain Sciences, Associates (1991-ongoing)
- Pan Africa News, Editorial Board (1997-ongoing)
- Steering Committee of the World Heritage Species Status Taskforce, Member (2002-ongoing)
- IUCN/SSC/ Section of the Great Apes (SGA), Executive Committee Member (2003-ongoing)
- Co-chairman of the Scientific Committee of the Great Apes Survival project (GRASP) of the UNEP/UNESCO (2003-ongoing)

Grant reviewer: NIH, National Science Foundation (USA), Swiss National Science Foundation, Leakey Foundation, National Geographic Society, Fulbright Foundation, Wenner-Gren Foundation,

Ad Hoc Reviewer: Behavioural and Brain Sciences, Animal Behaviour, Nature, Behaviour, Ethology, Primates, International Journal of Primatology, American Journal of Primatology, Folia Primatologica, American Journal of Physical Anthropology, Current Anthropology, Behavioural Ecology, Proceedings of the National Academy Science, Serie B, Quarterly Review of Biology, American Naturalists, Journal of Human Evolution, Proceedings of the Royal Society: Biological Sciences, Journal of Evolutionary Biology.

Awards and other honours

- 1985 Prix Cortaillod for talented Swiss scientists under 35 years old, University of Neuchâtel, Switzerland.
- 1987 Great Apes Fellowship of the Leakey Foundation, Pasadena.
- 1989 Great Apes Fellowship of the Leakey Foundation, Pasadena.
- 1999 Phillip Morris Research Price, München.
- 2013 Medal "Officier de l'Ordre National" by the president of Côte d'Ivoire Alassane Ouattara 2013

Publications

Books:

Boesch, C. 2012: *Wild Cultures: A Comparison between Chimpanzee and Human Cultures*. Cambridge: Cambridge University Press.

Boesch, C. and O'Connell, S. 2012: *Chimpanzee: The Making of the Film*. Disney Editions New York

Boesch, C. 2009. *The Real Chimpanzee: Sex Strategies in the Forest*. Cambridge: Cambridge University Press.

Boesch, C. and Boesch-Achermann, H. 2000. *The Chimpanzees of the Taï Forest: Behavioural Ecology and Evolution*. Oxford: Oxford University Press.

Sanz Crickette M. , Call, J., Boesch, C. 2013: *Tool Use in Animals - Cognition and Ecology* Cambridge: Cambridge University Press.

Boesch, C., Grundmann, E., Mulhauser, B. 2011: *Manifeste pour les Grands Singes*. Le Savoir Suisse, Presses Polytechniques et Universitaires Romandes.

Robbins, MM. and Boesch, C. (eds) 2011. *Among African Apes: Stories and photos from the field*. Berkeley: University of California Press.

Hohmann, G. and Robbins, M. Boesch, C. 2006. *Feeding Ecology in Apes and Other Primates*. Cambridge: Cambridge University Press.

Reichard, U. and C. Boesch. 2003. *Monogamy: Mating Strategies and Partnerships in Birds, Humans and Other Mammals*. Cambridge: Cambridge University Press.

Boesch, C., Hohmann, G. and Marchant, L. 2002. *Behavioural Diversity in Chimpanzees and Bonobos*. Cambridge: Cambridge University Press.

2005

Tutin, C., Stokes, E. Boesch, C. and Kormos, R. 2005. *Regional Action Plan for Chimpanzees and Gorillas in West Equatorial Africa*. Washington: Conservation International.

2003

Doran, D. and Boesch, C. 2003. *Special Issue on Western Lowland Gorillas*. *American Journal of Primatology*.

Kormos, R. and Boesch, C. 2003. Regional Action Plan for Chimpanzees in West Africa. Washington: Conservation International.

Kormos, R., Boesch, C., Bakkar, M. and Butynski, T. 2003. The West African Chimpanzee: Status Survey and Conservation Action Plan. IUCN, Gland, Switzerland and Cambridge, UK.

Publications

2013

Boesch, C. 2013: Ecology and cognition of tool use in chimpanzees. In: Tool Use in Animals - Cognition and Ecology Cambridge: Cambridge University Press.

Borchers C., Boesch C., Riedel J., Guilahoux H., Ouattara D., Randler R. (2013). Environmental Education in Côte d'Ivoire/West Africa: Extra-Curricular Primary School Teaching Shows Positive Impact on Environmental Knowledge and Attitudes. *International Journal of Science Education, Part B*. www.tandfonline.com/doi/full/10.1080/21548455.2013.803632

Calvignac-Spencer, S., Merkel, K., Kutzner, N., Kühl, H., Boesch, C., Kappeler, P.M., Metzger, S., Schubert, G., Leendertz, F. (2013) Carrion fly-derived DNA as a tool for comprehensive and cost-effective assessment of mammalian biodiversity. *Molecular Ecology* 22, 915–924.

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EXHIBIT B

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