

UNIVERSITY OF PRETORIA

FORMAT OF CURRICULUM VITAE

The University prefers the following CV format. Specific items can be added to or omitted to reflect Faculty specific and/or individual circumstances, but the given numbering should, as far as possible, be followed to facilitate the evaluation process.

Provision of information about race and gender is optional, but will assist the University to report in terms of current Employment Equity legislation.

EVALUATION DATE: (Office use only)

1. BIOGRAPHICAL SKETCH

| 1.1 GENERAL INFORMATION | | | | | | | | | | |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------|--|----------------------------|------|---------------------|----------------------------|----------------------------------|---|
| Surname | Ganswindt | | | | | | | | | |
| First names | André | | | | ID Number | | C3J095FTG | | | |
| Citizenship | German | | | | Title | Prof | Female | | Male | X |
| Place of birth | Berlin, Germany | | | | Date of birth | | 14 August 1971 | | | |
| Population group | African | | Coloured | | Indian | | White | x | Other (Please specify) | |
| Department | Anatomy & Physiology | | | | Position | | Associate Professor | | | |
| Direct Telephone | 012-529-8429 | | | | Direct Telefax | | 012-529-8320 | | | |
| E-mail | aganswindt@zoology.up.ac.za ; andre.ganswindt@up.ac.za | | | | | | | | | |
| Date of appointment | 01 January 2013 | | | | Permanent full-time | | | Temporary full-time | | X |

| 1.2 ACADEMIC/PROFFESIONAL QUALIFICATIONS OBTAINED | | | | |
|---------------------------------------------------|---------------------------|-------------------------------------------------|------|-----------------------|
| Degree/ Diploma | Field of study | Higher education institution | Year | Distinctions |
| PhD (Dr. rer. nat.) | Biology | University of Münster, Germany | 2004 | magna cum laude |
| Graduate engineer | Biotechnology | University of Applied Sciences, Berlin, Germany | 2000 | pass with distinction |
| Apprenticeship diploma | Biological Lab Technology | German Chamber of Industry and Commerce | 1992 | |

| 1.3 WORK EXPERIENCE TO DATE | | |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|
| Name of employer | Capacity and/or type of work | Period |
| University of Pretoria, Dept. of Anatomy and Physiology | Associate Professor, Head of the Endocrine Research Laboratory | from 03/13 |
| University of Pretoria, Dept. of Anatomy and Physiology | Senior Lecturer, Head of the Endocrine Research Laboratory | from 01/13 to 2/13 |
| University of Pretoria, Dept. of Production Animal Studies | Extraordinary Lecturer, Head of the Endocrine Research Laboratory | from 01/10 to 12/12 |
| University of Pretoria, Dept. of Zoology and Entomology | Research Fellow, Head of the Endocrine Research Laboratory | from 03/09 to 12/12 |
| University of Pretoria, Dept. of Production Animal Studies | Postdoctoral Fellow | from 02/06 to 02/09 |
| German Primate Centre, Dept. of Reproductive Biology | Postdoctoral Fellow | from 10/04 to 01/06 |
| German Primate Centre, Dept. of Reproductive Biology | Postgraduate Assistant | from 06/00 to 12/02 |
| Max-Delbrück-Centre for Molecular Medicine, Dept. of Genome Research | Graduate Assistant | from 07/98 to 12/98 |
| Max-Bürger Hospital, Analytical laboratory | Community service | from 12/95 to 12/96 |
| Bayer Schering Pharma AG, Inst. for Cell- and Molecular Biology & Dept. for Neuro-Psycho-Pharmacology | Biological Lab Technician | from 02/92 to 11/95 |

2. TEACHING ACTIVITIES

| 2.1 Courses presented | | |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------|
| Course | Level | Self-developed |
| 1 st South African Workshop for Non-invasive Hormone Monitoring | Graduate and postgraduate level | Yes |
| National Workshop on Application of Non- invasive Hormone Monitoring to Wildlife Endocrine Assessment, India | Postgraduate level & technical staff | No |
| Lecture series on Wildlife Endocrinology for the technical staff at the Section of Physiology, University of Pretoria | Technical staff | Yes |

| 2.2 Other education and pedagogic responsibilities | | |
|-------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------|
| task | Year | Associated Institution |
| Supervision and laboratory training of Mr. Jambwa Kudakwashe – Research Module B. Tech Veterinary Technology Program | 2012 | Tshwane University of Technology |
| Presenting at the AGM of the Mammal Research Institute – <i>ERL</i> | 2012 | University of Pretoria |

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|-------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------|
| <i>Where are we after 3 years?</i> | | |
| Introductory lecture on <i>Behavioural Endocrinology</i> | 2011 | CNRS field station – Hwange National Park |
| Presenting at the AGM of the Mammal Research Institute – <i>The Endocrine Research Laboratory (ERL)</i> | 2011 | University of Pretoria |
| Oral report on the new developments in terms of non-invasive endocrine research in crocodiles | 2011 | IUCN Species Survival Commission Meeting |
| Introductory lecture on the <i>Advances in the Endocrine Research Laboratory</i> | 2011 | Dept. of Zoology, University of Pretoria |
| Supervision and training of Mr. Joseph R.M. Makalo – Research Module B. Tech Veterinary Technology Program | 2011 | Tshwane University of Technology |
| Presenting at the PAS Research Forum - <i>From Aardvark to Zebra: Advances in the Endocrine Research Laboratory</i> | 2011 | University of Pretoria |
| Co-supervisor of Ms. Marina du Preez – Research Project serving to attain a B. Tech degree (Animal Health) | 2010 - 2011 | University of South Africa |
| PAS Workshop on Postgraduate Student Training and Research - <i>Introducing the new Endocrine Research Laboratory</i> | 2010 | University of Pretoria |
| Supervision and laboratory training of Ms. Gabriela Benavides Valades – MSc project at the Dept. of Production Animal Studies | 2009 - 2012 | University of Pretoria |
| Supervision and laboratory training of Mr. Ncube Hlengisizwe - Mphil project at the Dept. of Forest Resources & Wildlife Management | 2009 - 2011 | National University of Science and Technology |
| Supervision and training of in total 30 Veterinary students during their 3 months research orientated internship in South Africa | 2007 - 2012 | University of Utrecht, Netherlands |

3. TEACHING OUTPUTS

3.1 Educational publications and products

- Ghosal R (2012) Handout for the National Workshop on Application of Non-invasive Hormone Monitoring to Wildlife Endocrine Assessment (Eds. R Ghosal, G Umapathy), pp. 1-44 (contributor/reviewer)
- Ganswindt A, Touma C, Muenscher S (2010) Handout for the 1st SA Workshop for Non-invasive Hormone Monitoring (Eds. A Ganswindt, S Muenscher), pp. 1-18 (main author/ editor)

4. OTHER TEACHING CONTRIBUTIONS

4.1 Membership of national and international bodies

n/a

4.2 Visits to local and overseas universities as guest professor or lecturer in regard to teaching

- 2012 - Guest lecture at the Leibniz Institute for Zoo and Wildlife Research, Germany
- 2012 - Invited lecturer for the Workshop for Non-invasive Hormone Monitoring at the Centre for

Molecular and Cellular Biology, Hyderabad, India

- 2009 - Guest lecture at the Centre of Ecological Science, Indian Institute of Science, Bangalore, India

4.3 Participation in national and international teaching associations, bodies, committees

n/a

5. POSTGRADUATE SUPERVISION

5.1 Supervision or co-supervision of students who have completed degrees

| Name of student | Degree/Title of dissertation/ thesis and date completed | Supervisor | Co-supervisor(s) | Duration of studies (years) |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------|-----------------------------|
| Mr. Peter Seeber | MSc/ Association between reproductive behaviour and androgen metabolite excretion in free-ranging male giraffes (<i>Giraffa camelopardalis</i>), 09/12 | Dr Ganswindt | Prof Crailsheim | 3 |
| Ms. Elize Fourie | MSc/ The influence of predators on physiological, hormonal and behavioural indicators of stress in plains zebra (<i>Equus quagga burchelli</i>), 09/12 | Prof Cameron | Dr Ganswindt | 4 |
| Mr. Bart Vlamings | Masters (Neuroscience & Cognition)/ Dog appeasing pheromone [®] : A useful tool to minimize stress and aggression of African wild dogs (<i>Lycaon pictus</i>)?, 11/11 | Prof Bertschinger | Dr Paris, Dr Ganswindt | 3 |
| Mrs. Melodie Bates | MSc/ Endocrine correlates of free-ranging African elephants (<i>Loxodonta africana</i>) treated with porcine zona pellucida vaccine, 09/10 | Prof Bertschinger | Dr Ganswindt | 4 |
| Mr. Peter Mueller | Diplom/ Faecal Androgen Excretion in the Male Asian Elephant and its Relation to Musth, 04/08 | Prof Elephantdt | Dr Heistermann, Dr Dehnhard, Dr Ganswindt | 2 |

5.2 Current post-graduate students

| Name of student | Degree enrolled for and date of first registration | Project title | Supervisor | Co-supervisor(s) | Year of registration |
|-------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|----------------------|
| Ms. Kouba Grobler | MMedVet, 01/2010 | Effect of Hot-iron branding on the cheek or upper hind limb on cortisol levels, behaviour, and production in feedlot calves | Prof Shakespeare | Prof Thompson, Dr Ganswindt | 3 |
| Ms. Silke Pfitzer | MMedVet, 01/2010 | Comparing physiological parameters of farmed Nile crocodiles (<i>Crocodylus niloticus</i>) captured manually and by means | Dr Myburgh | Dr Ganswindt | 3 |

| | | | | | |
|----------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------|----|
| | | of electrical immobilisation | | | |
| Mr. Juan Scheun | MSc, 01/2012 | As Time Goes By: gonadal and adrenocortical endocrine function in the lesser bushbaby (<i>Galago moholi</i>) | Dr Ganswindt | Prof Bennett, Dr Nowak | 2 |
| Mr. John Birrell | MSc, 01/2013 | The effects of GnRH vaccination in reducing post-surgical castration complications carried out under field conditions in colts | Prof Schulman | Prof Bertschinger, Sr Botha, Prof Guthrie, Prof Nöthling, Dr Ganswindt | 1 |
| Mr. Jozua Viljoen | PhD, 2000 | Translocation of elephants in a South African Savanna – Studies on endocrinological changes, vocalization and feeding behaviour | Dr Ganswindt (since 06/11) | Dr Langbauer Jr. | 13 |
| Ms. Annemieke van der Goot | PhD, 03/2011 | Investigating reproductive physiology in the free-living White rhinoceros: providing new insights towards enhanced breeding success in captivity | Prof Martin | Prof Millar, Dr Penfold, Dr Paris, Dr Ganswindt | 2 |

6. RESEARCH FUNDING

| 6.1 Obtaining research funds | | | |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|
| Origin of research funds | Title of research project or programme | Duration | Money allocated (R) |
| South African National Research Foundation | Incentive Funding for rated researchers (since 2011) | 6 years | 40.000 p.a. |
| Novartis / SAVF Wildlife Research Fund | Association between reproductive behaviour and androgen metabolite excretion in free-ranging male giraffes (<i>Giraffa camelopardalis</i>) | 2012 one-off | ~16.000 |
| Novartis / SAVF Wildlife Research Fund | Non-invasive assessment of adrenocortical function in captive Nile crocodiles (<i>Crocodylus niloticus</i>) and its relation to housing conditions | 2011 one-off | ~22.000 |
| Giraffe Conservation Foundation | Reproductive behaviour and its endocrine correlates in free-ranging male Angolan giraffes (<i>Giraffa camelopardalis angolensis</i>) | 2011 one-off | ~14.000 |
| UP Veterinary Faculty Research Fund | Association between reproductive behaviour and androgen metabolite excretion in free-ranging male giraffes (<i>Giraffa camelopardalis</i>) | 2011 one-off | ~5.000 |
| Rufford Small Grants Foundation | Hormonal and behavioural correlates of musth in male Asian Elephants | 2010 one-off | ~80.000 |
| German Primate Centre | Trigger and regulatory mechanisms of musth in African elephants (<i>Loxodonta Africana</i>) | 2008 one-off | ~50.000 |
| Novartis / SAVF Wildlife Research Fund | Trigger and regulatory mechanisms of musth in African elephants (<i>Loxodonta Africana</i>) | 2006 one-off | ~16.000 |
| UP Veterinary Faculty Research Fund | Trigger and regulatory mechanisms of musth in African elephants (<i>Loxodonta Africana</i>) | 2006 one-off | ~15.000 |
| Elephants for Africa | Collaborative project - Elephant research in the | 2012 one-off | ~10.000 |

| | | | |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------|
| | Okavango Delta | | |
| UP Dept. of Production Animal Studies | Collaborative project - Effect of Hot-iron branding on the cheek or upper hind limb on cortisol levels, behaviour, and production in feedlot calves | 2012 one-off | ~17.000 |
| UP Dept. of Zoology and Entomology | Collaborative project – Reproductive biology of spiny mice (<i>Acomys spinosissimus</i>) | 2012 one-off | ~21.000 |
| National Zoological Gardens of SA | Service work – Monitoring of reproductive function in African elephants | 2012 one-off | ~5.000 |
| University of Fort Hare | Collaborative project – The Spatial, feeding and behavioral ecology of Samango monkeys (<i>Cercopithecus mitis labiatus</i>) | 2012 one-off | ~4.000 |
| University of Tasmania | Collaborative project – Enzyme immunoassay validation for assessing adrenocortical activity of African ungulates using FGM analysis | 2012 one-off | ~4.000 |
| University of Hamburg | Collaborative project – Gonadal and adrenocortical endocrine function in the lesser bushbaby (<i>Galago moholi</i>) | 2012 one-off | ~9.000 |
| Elephants for Africa | Collaborative project - Elephant research in the Okavango Delta | 2011 one-off | ~40.000 |
| UP Dept. of Zoology and Entomology | Collaborative project – Assessment of adrenocortical activity in African buffalo (<i>Syncerus caffer</i>) | 2011 one-off | ~6.000 |
| Virginia Tech | Collaborative project - potential route of infection and mode of transmission of <i>Mycobacterium mungos</i> in banded mongoose (<i>Mungos mungo</i>) | 2011 one-off | ~97.000 |
| University of South Africa | Collaborative project –Assessment of stress in trained African elephants performing elephant back safaris | 2011 one-off | ~7.000 |

7. RESEARCH OUTPUTS

7.1 Publications in peer-reviewed or refereed journals

- Viljoen JJ, Reynecke HC, Panagos MD, Langbauer Jr WR, **Ganswindt A** (2013) Diurnal selection preferences for woody plants by breeding herds of African elephants (*Loxodonta africana*). IN: International Journal of Ecology, *in press*
- Codron J, Kirkman K, Duffy KJ, Sponheimer M, Lee-Thorp JA, **Ganswindt A**, Clauss M, Codron D (2013) Stable isotope turnover and variability in tail hairs of captive and free-ranging African elephants (*Loxodonta africana*) reveal dietary niche differences within populations IN: Canadian Journal of Zoology, 91: 124-134
- Ludwig C, Wachter B, Silinski S, **Ganswindt A**, Bertschinger H, Hofer H, Dehnhard M (2013) Characterization and validation of an enzyme-immunoassay for the non-invasive assessment of faecal glucocorticoid metabolites in cheetahs (*Acinonyx jubatus*) IN: General and Comparative Endocrinology, 180(1): 15-23
- **Ganswindt A**, Tordiffe ASW, Stam E, Howitt MJ, Jori F (2012) Determining adrenocortical endocrine activity as a measure of stress in African buffalo (*Syncerus caffer*) based on faecal analysis. IN: African Zoology, 47(2): 261-269
- Stoeger AS, Heilmann G, Zeppelzauer M, **Ganswindt A**, Hensman S, Charlton B (2012) Visualizing sound emission of elephant vocalizations: evidence for two rumble production types. IN: PLoS ONE 7(11): e48907. doi:10.1371/journal.pone.0048907

- Seeber PA, Ciofolo I, **Ganswindt A** (2012) Behavioural inventory of the giraffe (*Giraffa camelopardalis*) IN: BMC Research Notes, 5:650 doi:10.1186/1756-0500-5-650
- Marneweck DG, **Ganswindt A**, Rhodes S, Bellem A, Bryant J, Wielebnowski N, Dalerum F (2012) Reproductive endocrinology of zoo-housed aardwolves (*Proteles cristata*) IN: Acta Theriologica, DOI 10.1007/s13364-012-0101-1
- Benavides G, **Ganswindt A**, Annandale H, Schulman ML, Bertschinger HJ (2012) Induction of anoestrus in free-ranging African elephants (*Loxodonta africana*) cows using a gonadotropin-releasing hormone vaccine. IN: BMC Reproduction Biology and Endocrinology, 10:63 doi:10.1186/1477-7827-10-63
- Laver P, **Ganswindt A**, Ganswindt SB, Williams M, Alexander K (2012) Non-invasive monitoring of glucocorticoid metabolites in banded mongooses (*Mungos mungo*) in response to biological and physiological challenges IN: General and Comparative Endocrinology, 179(2): 178-183
- Ahlers MJ, **Ganswindt A**, Münscher S, Bertschinger HJ (2012) Endocrine correlates of free-ranging African elephants (*Loxodonta africana*) treated with porcine zona pellucida vaccine. IN: Theriogenology, 78: 77-85
- **Ganswindt A**, Brown J, Freeman E, Kouba A, Penfold L, Santymire R, Vick M, Wielebnowski N, Willis E, Milnes M (2012) International Society for Wildlife Endocrinology: the future of endocrine measures for reproductive science, animal welfare, and conservation biology IN: Biology Letters, 8: 695-697
- Seeber PA, Ndlovu HT, Fritz H, **Ganswindt A** (2012) Grazing behaviour of the Giraffe (*Giraffa camelopardalis*) in Hwange National Park. IN: African Journal of Ecology, 50(2): 247-250
- Barnier F, Grange S, **Ganswindt A**, Ncube H, Duncan P (2012) Inter-birth interval in Zebras is longer following the birth of male foals than after female foals. IN: Acta Oecologica, 42: 11-15
- **Ganswindt A**, Muilwijk C, Engelkes M, Muenscher S, Bertschinger H, Paris, M, Palme R, Cameron E, Bennett N, Dalerum F (2012) Validation of Noninvasive monitoring of adrenocortical endocrine activity in ground-feeding Aardwolves (*Proteles cristata*): Exemplifying the influence of consumption of inorganic material for fecal steroid analysis IN: Physiological and Biochemical Zoology, 85(2): 194-199
- Ncube H, Duncan P, Grange S, Cameron EZ, Barnier F, **Ganswindt A** (2011) Pattern of faecal 20-oxopregnane and oestrogen concentrations during pregnancy in free-ranging plains zebra mares. IN: General and Comparative Endocrinology, 172: 358-362
- Hulsman A, Dalerum F, **Ganswindt A**, Muenscher S, Bertschinger H, Paris M (2011) Non-invasive monitoring of glucocorticoid metabolites in brown hyena faeces. IN: Zoo Biology, 30: 451-458
- Hulsman A, Dalerum F, Swanepoel L, **Ganswindt A**, Sutherland C, Paris M (2010) Patterns of latrine use by brown hyenas (*Hyaena brunnea*) in the Highveld region of South Africa. IN: Wildlife Biology, 16: 445-451
- **Ganswindt A**, Muenscher S, Henley M, Palme R, Thompson P, Bertschinger H (2010) Concentrations of faecal glucocorticoid metabolites in physically injured free-ranging African elephants (*Loxodonta africana*). IN: Wildlife Biology, 16: 323-332
- **Ganswindt A**, Muenscher S, Henley M, Henley S, Heistermann M, Palme R, Thompson P, Bertschinger H (2010) Endocrine correlates of musth and the impact of ecological and social factors in free-ranging African elephants (*Loxodonta africana*). IN: Hormones and Behavior, 57: 506-510
- Viljoen JJ, **Ganswindt A**, du Toit JT, Langbauer Jr WR (2008) Translocation stress and faecal glucocorticoid metabolite levels in free-ranging African savanna elephants. IN: Journal of Wildlife Management, 38(2): 146-152

- Rasmussen HB, **Ganswindt A**, Douglas-Hamilton I, Vollrath F (2008) Endocrine and behavioural changes in male African elephants: linking hormone changes to sexual state and reproductive tactic. IN: *Hormones and Behaviour*, 54: 539-548
- Viljoen JJ, **Ganswindt A**, Palme R, Reynecke HC, du Toit JT, Langbauer Jr WR (2008) Measurement of faecal glucocorticoid concentrations in free-ranging African elephants: baseline values from the Kruger National Park IN: *Koedoe*, 50(1): 18-21
- Laws N, **Ganswindt A**, Harris M, Harris S, Heistermann M, Sherwin C (2007) A case-study: Faecal corticosteroid and behaviour as indicators of welfare during relocation of an Asiatic Elephant. IN: *Journal of Applied Animal Welfare Science*, 10(4): 349-358
- Fichtel C, Kraus C, **Ganswindt A**, Heistermann M (2007) Influence of reproductive season and rank on fecal glucocorticoid levels in free-ranging male Verreaux's sifakas (*Propithecus verreauxi*) IN: *Hormones and Behavior*, 51(5):640-648
- Wittemyer G, **Ganswindt A**, Hodges JK (2007) The impact of ecological variability on the reproductive endocrinology of wild female African elephants. IN: *Hormones and Behavior*, 51(3): 346-354
- Heistermann M, Palme R, **Ganswindt A** (2006) Comparison of different enzymeimmuno-assays for assessment of adrenocortical activity in primates based on fecal analysis IN: *American Journal of Primatology*, 68(3): 257-273
- **Ganswindt A**, Heistermann M, Hodges JK (2005) Physical, physiological and behavioural correlates of musth in captive African elephants (*Loxodonta africana*). IN: *Physiological and Biochemical Zoology*, 78 (4): 505-514
- **Ganswindt A**, Rasmussen HB, Heistermann M, Hodges JK (2005) The sexually active states of free-ranging male African elephants (*Loxodonta africana*): Defining musth and non-musth using endocrinology, physical signals, and behaviour. IN: *Hormones and Behavior*, 47 (1): 83-91
- **Ganswindt A**, Heistermann M, Palme R, Borragan S, Hodges JK (2003) Non-invasive assessment of adrenal function in the male African elephant (*Loxodonta africana*) and its relation to musth. IN: *General and Comparative Endocrinology*, 134(2): 156-166
- **Ganswindt A**, Heistermann M, Borragan S, Hodges JK (2002) Assessment of testicular endocrine function in captive African elephants by measurement of urinary and fecal androgens. IN: *Zoo Biology*, 21: 27-36

7.2 Books and/or chapters in books

- **Ganswindt A**, Muenscher S (2008) Take a nap: sleeping behaviour of free-ranging male African elephants (*Loxodonta africana*) during the day IN: 4th CPB Meeting in Africa: Mara 2008. "Molecules to migration: The pressures of life" (Ed S. Morris & A. Vosloo). Medimond Publishing Co, via Maserati 6/2, 40124 Bologna, Italy, pp. 441-448 (contributing author)
- **Ganswindt A** (2008) Physical, physiological, and behavioural changes associated with male African elephant (*Loxodonta africana*) sexual activity and the phenomenon of musth. IN: 4th CPB Meeting in Africa: Mara 2008. "Molecules to migration: The pressures of life" (Ed S. Morris & A. Vosloo). Medimond Publishing Co, via Maserati 6/2, 40124 Bologna, Italy, pp. 449-456 (contributing author)

7.3 Published full-length conference papers/keynote addresses

n/a

7.4 Non-refereed publications or popular articles

- **Ganswindt A**, Parys A, Wielebnowski N, Lehmann T (2011) Non-invasive assessment of reproductive and adrenocortical steroid hormones in captive Aardvarks (*Orycteropus afer*). *AFROTHERIAN CONSERVATION Newsletter of the IUCN/SSC Afrotheria Specialist Group*, Issue 8, Pages 17-18
- **Ganswindt A**, Bertschinger HJ (2006) Trigger and regulatory mechanisms of musth in African elephants (*Loxodonta africana*). *EAZA annual meeting Research Committee Newsletter*
- **Ganswindt A**, Heistermann M, Hodges JK (2006) Endocrine, physical and behavioural correlates of musth in African elephants (*Loxodonta africana*). *EAZA annual meeting Research Committee Newsletter*
- **Ganswindt A** (2005) Characterisation of the phenomenon of musth in African elephants. *Journal of European Elephant Keeper and Manager Association*, Volume 8, Issue 3&4, 2005. Pages 3-7
- **Ganswindt A** (2005) Endocrine, physical and behavioural correlates of musth in African elephants (*Loxodonta africana*). *Mitteilungsblatt Ethologische Gesellschaft e.V.*, 54 (7/05), p.14
- **Ganswindt A**, Heistermann M, Palme R, Borragan S, Hodges JK (2004) Endocrine and behavioural correlates of musth in captive African elephants (*Loxodonta africana*). *EAZA annual meeting Research Committee Newsletter 10/2004*, pp.89-90
- **Ganswindt A**, Heistermann M, Hodges JK (2002) Endocrine and behavioural correlates of musth in captive African elephants (*Loxodonta africana*) *EAZA annual meeting Research Committee Newsletter 03/2002*, p.51

7.5 Patents

n/a

7.6 Technical reports

n/a

8. OTHER SCHOLARLY RESEARCH-BASED CONTRIBUTIONS

8.1 Participation in conferences, workshops and short courses - specify type of contribution

8.1.1 National

- 2012 - 3rd NZG Annual Research Symposium (participant)
- 2012 - 10th annual symposium of the Primate Ecology and Genetics Group, Scheun J, Ganswindt A, Nowack J, Benett N, As Time Goes By: gonadal and adrenocortical endocrine function in the lesser bushbaby (*Galago moholi*), pp. 8-9 (contributing author, participant)
- 2011 - 2nd NZG Annual Research Symposium, Ganswindt A, Tordiffe, ASW, Stam E, Howitt M, Jori F, Identification of a suitable enzyme immunoassay for assessment of adrenocortical endocrine function in African buffalo (*Syncerus caffer*) based on faecal analysis, p. 19 (oral presentation)
- 2011 - 2nd NZG Annual Research Symposium, Fourie E, Tordiffe ASW, Münscher SB, Cameron EZ, Ganswindt A, Non-invasive assessment of adrenocortical activity as an endocrine response to stress in Plains zebra (*Equus burchelli*), p. 23 (contributing author, participant)
- 2011 - 30th World Veterinary Congress, Grobler MJ, Ganswindt A, Shakespeare AS, Thompson P, Welfare issues around hot iron branding in South African feedlot cattle. (contributing author)

- 2011 - 51st Conference of the Zoological Society of Southern Africa, Marneweck D, Cameron E, Ganswindt A, Wielebnowski N, Dalerum F, Monitoring of reproductive and adrenocortical steroid hormones in captive bred aardwolves, *Proteles cristatus*. (contributing author)
- 2010 - 7th Kimberley Biodiversity Research Symposium, Dalerum, F., Bennett, N.C., Cameron EZ, De Vries L, Ganswindt A, Kotze R, Marneweck D, Pirk CWW, Sarli J, Theron C, Causes and consequences of mammalian resource specializations - What can we learn from South African myrmecophages? (contributing author)
- 2009 - 50th Anniversary conference of the Zoological Society of Southern Africa, Ganswindt A, Muenscher S, Henley M, Henley S, Bertschinger H, Endocrine correlates of musth and the role of ecological and social factors in free-ranging African elephants (*Loxodonta africana*) within the Kruger National Park, p.28 (oral presentation)
- 2009 - 50th Anniversary conference of the Zoological Society of Southern Africa, Muenscher S, Henley M, Henley S, Bertschinger H, Ganswindt A, Behavioural and endocrinological changes in free-ranging African elephants with physical injury, p.72-73 (poster presentation)
- 2009 - 7th Annual Savanna Science Network Meeting, Ganswindt A, Münscher S, Non-invasive assessment of adrenocortical activity as an endocrine response to stress in African elephants (*Loxodonta africana*), p.121 (poster presentation)
- 2008 - 6th Annual Kruger National Park Science Network Meeting, Ganswindt A, Münscher S, Take a nap: sleeping behaviour of free-ranging male African elephants (*Loxodonta africana*) during the day, p.88 (poster presentation)
- 2008 - Elephant Management & Owners Association Workshop, Ganswindt A, Münscher S, Endocrine changes in male African elephants in relation to reproductive activity and ecological variability. p.6-7 (oral presentation)
- 2007 - Elephant Management & Owners Association Workshop, Ganswindt A, Rasmussen HB, Musth and sexually active non-musth: a comparison of endocrine correlates of two sexually active states in free-ranging male African elephants. (oral presentation)
- 2007 - 5th Annual Kruger National Park Science Network Meeting (participant)
- 2006 - Elephant Management & Owners Association Workshop, Ganswindt A, Münscher S, Bertschinger HJ, Non-invasive assessment of testicular and adrenocortical activity in male African Elephants using enzyme immunoassays, p.6 (poster presentation)

8.1.2 International

- 2012 - 105th annual meeting of the German Zoological Society, Ganswindt A, *Omnis amans amens* - Endocrine correlates of male reproductive behaviour in terrestrial megaherbivores, p. 9 (invited speaker)
- 2012 - 3rd Annual meeting of the International Society for Wildlife Endocrinology, Seeber PA, Duncan P, Fritz H, Ganswindt A, Endocrine drivers of flexible rutting behaviour in male Giraffes (*Giraffa camelopardalis*), pp. 33-34 (oral presentation)
- 2012 - 3rd Annual meeting of the International Society for Wildlife Endocrinology, Vlamings B, Paris MCJ, Ganswindt A, Bertschinger HJ Dog appeasing pheromone®: A useful tool to minimize stress and aggression in African wild dogs (*Lycaon pictus*)? pp. 53-54 (contributing author)
- 2012 - 3rd Annual meeting of the International Society for Wildlife Endocrinology, Van der Goot AC, Dalerum F, Ganswindt A, Martin GB, Millar RP, Paris MCJ, Faecal progesterone patterns in wild African white rhinoceros (*Ceratotherium simum*), p. 36 (contributing author)
- 2012 - ESA Mid-Atlantic Chapter Annual Meeting, Laver P, Ganswindt A, Muenscher S, Alexander K, Urban habitat moderates seasonality in the stress physiology, movement ecology, and foraging behavior of free-ranging banded mongooses, p. 76 (contributing author)

- 2011 - 2nd Annual meeting of the International Society for Wildlife Endocrinology, Ghosal R, Ganswindt A, Seshagiri PB, Sukumar R, Endocrine and behavioural correlates of musth in the two phenotypes of male Asian elephants (*Elephas maximus*), pp. 10-11 (contributing author)
- 2011 - 2nd Annual meeting of the International Society for Wildlife Endocrinology, Ganswindt A, Tordiffe, ASW, Stam E, Howitt M, Jori F, Identification of a suitable enzyme immunoassay for assessment of adrenocortical endocrine function in African buffalo (*Syncerus caffer*) based on faecal analysis, p. 7 (oral presentation)
- 2011 - 2nd Annual meeting of the International Society for Wildlife Endocrinology, Ganswindt A, Gierhahn D, Bellem A, Wielebnowski N, Monitoring of reproductive steroid hormones in female Aardvarks (*Orycteropus afer*) – evidence for embryonic diapause, pp. 7-8 (oral presentation)
- 2011 - 8th International Conference on Behaviour, Physiology and Genetics of Wildlife, Muenscher S, Myburgh JG, Cameron EZ, Ganswindt A, Assessment of adrenocortical endocrine function in captive Nile crocodiles (*Crocodylus niloticus*) by measuring glucocorticoids or their metabolites in serum and faecal samples, pp.120-121 (poster presentation)
- 2011 - 8th International Conference on Behaviour, Physiology and Genetics of Wildlife, Ganswindt A, Tordiffe, ASW, Stam E, Howitt M, Jori F, Non-invasive assessment of adrenocortical endocrine function in African buffalo (*Syncerus caffer*) by measurement of glucocorticoid metabolites in faeces, pp. 68-69 (poster presentation)
- 2011 - 11th African Small Mammal Society conference, Ganswindt A, Wielebnowski N, Take a break – endocrinological indications for embryonic diapause in the Aardvark (*Orycteropus afer*), pp.19-20 (oral presentation)
- 2010 - 1st Annual meeting of the International Society for Wildlife Endocrinology, Ganswindt A, Muilwijk C, Engelkes M, Muenscher S, Bertschinger H, Paris M, Palme R, Dalerum F, Faecal steroid monitoring in free-ranging Aardwolf (*Proteles cristatus*) – the importance of assessing the fraction of inorganic food intake, p.3 (oral presentation)
- 2010 - 13th International Behavioral Ecology Congress, Ganswindt A, Muenscher S, Henley M, Henley S, Heistermann M, Palme R, Thompson P, Bertschinger H, Endocrine correlates of musth and the role of socioecological factors in free-ranging African elephants, p.72 (oral presentation)
- 2010 - Annual Meeting of GRI-Biodiversity & Global Change in Southern Africa in Stellenbosch, South Africa (participant)
- 2009 - 7th International Conference on Behaviour, Physiology and Genetics of Wildlife, Hulsman A, Dalerum F, Ganswindt A, Muenscher S, Bertschinger H, Paris M, Evaluation of non-invasive monitoring of stress hormones in brown hyena (*Hyaena brunnea*), p.97 (contributing author)
- 2008 - 4th International Conference in Africa for Comparative Physiology & Biochemistry, Ganswindt A, Münscher S, Take a nap: sleeping behaviour of free-ranging male African savannah elephants during the day, p.121 (poster presentation)
- 2008 - 4th International Conference in Africa for Comparative Physiology & Biochemistry, Ganswindt A, Physical, physiological and behavioural correlates of musth in African elephants (*Loxodonta africana*), pp. 66-67 (oral presentation)
- 2006 - 40th ISAE International Congress, Laws N, Harris M, Sherwin C, Ganswindt A, Heistermann M, A case-study: Faecal corticosteroid and behaviour as indicators of welfare during relocation of an Asiatic Elephant, P2/129 in the poster programme, p.11 (contributing author)
- 2006 - 22nd EAZA Conference, Ganswindt A, Heistermann M, Hodges JK, Musth in African elephants (*Loxodonta africana*). Proceedings of the 22nd EAZA Conference (oral presentation)
- 2005 - Congress of the European Federation for Primatology, Heistermann M, Palme R, Ganswindt A, Assessing stress in primates using faecal glucocorticoids: the importance of validation, Primate Report 72, p.43 (participant)

- 2004 - EEKMA-Tagung Duisburg, Germany, Ganswindt A, Charakterisierung des Musth-Phänomens bei Afrikanischen Elefanten (*Loxodonta africana*). Beiträge zur Elefantenhaltung in Europa, pp.29-34 (oral presentation)
- 2004 - 5th International Symposium on Physiology, Behaviour and Conservation of Wildlife, Ganswindt A, Rasmussen HB, Heistermann M, Hodges JK, Characterisation of sexually active states in free-ranging male African elephants (*Loxodonta africana*) using endocrinological and external physical signs. Advances in Ethology 38, p.106 (oral presentation)
- 2004 - 15th Symposium on Tropical Animal Health and Production in Utrecht, Netherlands (participant)
- 2003 - Multidisciplinary Summer school of the Evangelischen Studienwerk e.V. Villigst, Germany (participant)
- 2002 - Practical course "Social systems of mammals" at the University of Muenster, Germany (participant)
- 2002 - 4th International Symposium on Physiology, Behaviour and Conservation of Wildlife, Ganswindt A, Heistermann M, Palme R, Borragan S, Hodges JK, Non-invasive assessment of adrenal function in the male African elephant (*Loxodonta africana*) and its relation to musth. Advances in Ethology 37, p.167 (oral presentation)
- 2001 - International Elephant and Rhino Research Symposium Vienna, Ganswindt A, Heistermann M, Borragan S, Hodges JK, Faecal glucocorticoid and androgen metabolite excretion in male African elephants (*Loxodonta africana*). Recent Research on Elephants and Rhinos, p.85 (poster presentation)
- 2001 - Practical course "Methods of behavioural biology" at the University of Muenster, Germany (participant)
- 2000 - 3rd International Symposium on Physiology, Behaviour and Conservation of Wildlife, Ganswindt A, Heistermann M, Borragan S, Hodges JK, Non-invasive assessment of testicular endocrine function in the African elephant (*Loxodonta africana*) by measurement of testosterone metabolites in faeces. Advances in Ethology 35, p.56 (poster presentation)

8.2 Teamwork and collaboration with others:

Other researchers (national and international)

Prof B Millar, Prof NC Bennett, Dr F Dalerum, Prof A Guthrie, Prof JO Nöthling, Prof ML Schulman, Prof HJ Bertschinger, Prof AS Shakespeare, Prof PN Thompson, Dr FO Fasina, Dr J Myburgh, Dr H Annandale, Dr K Wimberger, Prof C McQuaid, Dr AJ Higgs, Dr A Tordiffe, Dr M Henley, Dr D Codron, Prof EZ Cameron, Prof G Martin, Prof R Palme, Dr A Stöger-Horwath, Dr K Evans, Dr P Duncan, Dr H Fritz, Dr S Grange, Dr M Heistermann, Dr M Dehnhard, Dr T Lehmann, Dr J Novak, Dr A Smith, Dr B Danzter, Prof R Sukumar, Prof PB Seshagiri, Dr R Ghosal, Dr M Paris, Dr T Stout, Dr N Wielebnowski, Prof K Alexander, Prof M Manser, Dr W Langbauer Jr

Other research institutions (national and international)

- University of Tasmania School of Zoology (Australia)
- University of Western Australia, School of Zoology (Australia)
- Institute for Breeding Rare & Endangered African Mammals (Australia)
- University of Veterinary Medicine, Dept. of Biomedical Sciences (Austria)
- University of Vienna, Dept. of Cognitive Biology (Austria)
- CNRS, Chizé Centre for Biological Studies (France)
- German Primate Centre, Reproductive Biology Unit (Germany)

- Leibniz Institute for Zoo and Wildlife Research, Reproduction Biology (Germany)
- Senckenberg Research Institute and Natural History Museum Frankfurt (Germany)
- University of Hamburg, Dept. for Animal Ecology and Nature Conservation (Germany)
- Indian Institute of Science, Centre for Ecological Sciences (India)
- Indian Institute of Science, Dept. of Molecular Reproduction, Development & Genetics (India)
- University of Utrecht, Faculty of Veterinary Medicine (Netherlands)
- University of Pretoria, Centre for Wildlife Management (South Africa)
- University of Pretoria, Dept. of Paraclinical Science (South Africa)
- University of Pretoria, Mammal Research Institute (South Africa)
- University of Pretoria, Dept. of Production Animal Science (South Africa)
- University of Pretoria, Equine Research Centre (South Africa)
- University of Fort Hare, Samango Monkey Project (South Africa)
- University of KwaZulu-Natal, School of Life Sciences (South Africa)
- Rhodes University, Zoology Department (South Africa)
- UNISA, Animal and Veterinary Public Health (South Africa)
- National Zoological Gardens of South Africa (South Africa)
- University of Zurich, Inst. of Evolutionary Biology and Environmental Studies (Switzerland)
- University of Cambridge, Dept. of Zoology (UK)
- Anglia Ruskin University, Dept. of Life Science (UK)
- Chicago Zoological Society (US)
- Virginia Tech, Dept. of Fish and Wildlife Conservation (US)

Industry/nonprofit organizations

- Adventures with Elephants
- Elephants for Africa
- Save the Elephants

8.3 Membership in national and international bodies

- International Society for Wildlife Endocrinology (Vice Chair)
- Institute for Breeding Rare and Endangered African Mammals (Advisory Board member)
- Elephant Specialist Advisory Group – South Africa (associated member)
- Zoological Society of Southern Africa (member)
- International Society for Behavioral Ecology (member)
- Ethologische Gesellschaft e.V. (member)
- Association for the Study of Animal Behaviour (ASAB) (member)
- Samango Monkey Working Group, NZG (member)

8.4 Visits to local and overseas universities or research institutes as guest professor or researcher

- 2012 - Leibniz Institute for Zoo and Wildlife Research, Germany (researcher)
- 2012 - Dept. of Mol. Reproduction, Develop. & Genetics, Indian Institute of Science (researcher)
- 2011 - CNRS field research station, Hwange National Park, Zimbabwe (researcher)
- 2010 - Dept. of Mol. Reproduction, Develop. & Genetics, Indian Institute of Science (researcher)
- 2010 - Dept. of Reproductive Biology, German Primate Centre (researcher)
- 2009 - Institute of Biochemistry, University of Veterinary Medicine, Austria (researcher)
- 2006 - Transboundary elephant research, Save the elephants, South Africa (researcher)

- 2006 - School of Human and Life Sciences, University of Surrey Roehampton, UK (researcher)
- 2005 - School of Human and Life Sciences, University of Surrey Roehampton, UK (researcher)
- 2003 - Dept. of Zoology & Experimental Psychology, University of Oxford, UK (collaboration)
- 2002 - Samburu elephant research project, Save the elephants, Kenya (field work)
- 2002 - Institute of Biochemistry, University of Veterinary Medicine, Austria (researcher)

9. ARTISTIC OUTPUTS (*if applicable*)

n/a

10. MANAGEMENT AND ADMINISTRATIVE DUTIES

- University of Pretoria Postdoctoral Association (Advisory Board member)

11. COMMUNITY SERVICE OR PROFESSIONAL SKILLS

11.1 Outreach projects

- Participant and contributing author of the 2007 Scientific Assessment of Elephant Management in South Africa (Bertschinger H, Delsink A, van Altena JJ, Kirkpatrick J, Killian H, Ganswindt A, Slotow R, Castley G (2008) Chapter 6: Reproductive control of elephants In: Elephant Management: A Scientific Assessment for South Africa (Eds. RJ Scholes, KG Mennell). Wits University Press, 1 Jan Smuts Avenue, Johannesburg, South Africa, pp. 257-328)

11.2 Professional service performed

- Jeffress Memorial Trust (Grant application evaluation)
- International Foundation for Science (Grant application evaluation)
- National Geographic Society (Grant application evaluation)
- GILDE - film & tv production (participation in film documentary)

11.3 Clinical service

n/a

11.4 Involvement with other universities/scientific institutions

- National Research Foundation (evaluation of application for rating)

11.5 Referee duties

- University of Pretoria MSc thesis of Ms Melodie J. Bates (internal examiner)
- Acting reviewer for the following journals:
 - National Research Foundation South Africa
 - Koedoe - Research Journal for the South African National Parks

- Diversity and Distributions – A journal of Conservation Biogeography
- Journal of General and Comparative Endocrinology
- Zoo Biology
- Animal Conservation
- Laboratory Animals
- Methods in Ecology and Evolution
- Theriogenology
- African Journal of Ecology
- European Journal of Wildlife Research
- Folia Primatologica
- Hormones and Behavior
- African Zoology
- Journal of Chemical Ecology
- Animal Welfare
- Ceylon Journal of Science
- Functional Ecology
- Zoological Studies
- Journal of Zoology
- Physiological and Biochemical Zoology
- Journal of Mammalogy
- Journal of Applied Animal Welfare Science
- EMU – Austral Ornithology
- PLOS ONE

12. AWARDS AND SCIENTIFIC/SCHOLARLY RECOGNITION

12.1 Evaluation status as scientist/scholar

- C1-rating from the National Research Foundation, South Africa (awarded 01/11)
- Research Fellowship of the University of Pretoria, South Africa (awarded 01/09)
- Postdoctoral Fellowship of the Claude Leon Foundation, South Africa (awarded 01/07)
- Postdoctoral Fellowship of the University of Pretoria, South Africa (awarded 03/06)
- Postgraduate Fellowship of the Ev. Studienwerk e.V. Villigst, Germany (awarded 10/02)

12.2 Research awards and prizes

n/a

12.3 Teaching awards and prizes

n/a

12.4 Artistic awards and prizes

n/a