

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA**

MARC ANDERSON, KELLY NELSON, *and*
JULIETTE MORIZUR,

Plaintiffs,

v.

SEAWORLD PARKS AND ENTERTAINMENT,
INC.,

Defendant.

Case No.: 3:15-cv-02172-JSW-JCS

OPENING EXPERT REPORT OF DR. PEDRO JAVIER GALLEG0

**CONTAINS INFORMATION DESIGNATED
CONFIDENTIAL BY SEAWORLD**

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I. INTRODUCTION

1. My name is Dr. Pedro Javier Gallego. I am an expert witness on behalf of Marc Anderson, Kelly Nelson, and Juliette Morizur (“Plaintiffs”). I have been asked to provide an opinion on the accuracy of SeaWorld’s statement to Ms. Morizur that captivity, in general, does not harm orcas.¹

2. I do not have any relationship with Ms. Morizur or the other plaintiffs. Furthermore, I have no relationship with the Plaintiffs’ attorneys, aside from this case. I do not have any financial interest in the outcome of this case.

3. In this report, I summarize my opinions based on the information presently available to me. My work on this case is continuing, and if more information is made available to me, I may amend my opinions and analysis. I have been told that SeaWorld will provide its own expert reports. I may review SeaWorld’s expert reports and respond to them if necessary.

II. PROFESSIONAL BACKGROUND AND QUALIFICATIONS

A. Education

4. I graduated as a Doctor in Veterinary Medicine (DVM) from the University of Liège, Belgium, in 2000. During those 6 years of the program I specialized in marine mammal medicine and pathology and participated in the Belgian stranding network (MARIN), which was based at my faculty. I carried out a 6-month internship at the Duisburg Zoo, which at that time hosted bottlenose dolphins, Amazon River dolphins, a Commerson’s dolphin, a beluga whale, and pinnipeds (both seals and sea lions).

¹ See *Anderson et al. v. SeaWorld Parks and Entertainment, Inc.*, Case No. 4:15-cv-2172 (N.D. Cal.), Dkt. 94, Third Amended Complaint, ¶ 20.

5. After graduating, I carried out a 2-year Masters in Veterinary Science in the same Zoo with the thesis “Dolphin blow cytology.” During this Masters, I also carried out consultancy work in different dolphinaria in Europe. I carried out another Masters in 2004 in Marine Mammal Science in the University of Bangor, Wales, UK, which included a specific program on marine mammal captivity, conservation and welfare. I carried out my Master’s thesis on the codas of sperm whales from the Canary Islands under the supervision of Dr Michel Andre from the LAB in Vilanova i la Geltru, Spain.

6. I am now a PhD candidate at the University of Liège, Belgium, with the subject “Toxicology and stable isotopes in humpback whales from the Mozambique and Ecuador.”

7. A copy of my CV is attached to this report as **Exhibit A**.

B. Research experience

8. I have studied wild orcas and other cetaceans in the Strait of Gibraltar every summer from 2005 to 2015. I have researched their biology and behaviour. I have also researched issues involving their welfare, such as the impact of fishing activities and whale watching.

9. I have been a member of different international scientific societies for over a decade: European Cetacean Society, Society for Marine Mammalogy, Benelux Congress of Zoology.

10. I have been carrying out research on humpback whales since 2011 in the Dominican Republic, in Ecuador and in Mozambique.

C. Work and roles in organizations

11. Since 2005 I have been appointed head of delegation for the government of Luxembourg at the Scientific Committee of the International Whaling Commission (“IWC”),

actively participating in working groups specifically dealing with cetacean medicine, pathology, conservation and welfare issues (Whale Killing Methods and Associated Welfare Issues, Cetacean Emerging and Re-emerging Diseases, Intersessional Working Group on Welfare). I am also appointed alternate commissioner for the Government of Luxembourg at the IWC. I have been appointed scientific advisor for the Ministry of Environment of Luxembourg at different international conventions such as ACCOBAMS (Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contiguous Atlantic Area), CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora,), CMS (Convention on the Conservation of Migratory Species of Wild Animals), AEWA (African-Eurasian Migratory Waterbird Agreement), the Bern Convention (Bern Convention on the Conservation of European Wildlife and Natural Habitats), and CCAMLR (Convention for the conservation of Antarctic marine living resources).

12. I have consulted for several international NGOs related to issues dealing with cetacean captivity, releases, illegal trade or welfare issues. I have also consulted on the evaluation of dolphin and killer whale holding facilities in Europe and in the USA.

13. In 2006, I carried out consultancy work regarding the seal hunt in Canada, and co-authored the publication “Welfare aspects of the Canadian seal hunt: Final report, 45 pp. Document submitted to EFSA (European Food Safety Authority),” which led to the European ban on the import of seal products.

D. Previous Cases

14. I testified at deposition as an expert witness in *People for the Ethical Treatment of Animals, et al. v. Miami Seaquarium*, Case No. 1:15-cv-22692 (S.D. Fla.). I have not testified as an expert witness, either at deposition or at trial, in any other case in the past four years.

III. COMPENSATION

15. Counsel for Plaintiffs have engaged me for this case. I am compensated at a rate of 400 € per day, consisting of an 8-hour working day. Days for which I spend less than 8 hours on this matter are pro-rated. For necessary travel in connection with this case (*e.g.*, to testify at deposition or at trial), I am compensated at a rate of 400 € per day, and my travel expenses will be reimbursed.

16. My compensation is in no way contingent upon the nature of my findings or the outcome of any proceeding.

IV. SUMMARY OF OPINIONS

17. In my opinion, SeaWorld's statement that captivity in general does not harm orcas is false. In my opinion, the opposite is true: in general, captivity harms orcas.²

18. Captivity is harmful for killer whales for several reasons. First, captive killer whales are kept in small, artificial enclosures that lead to harmful environmental contacts (for example, hitting a gate). Second, killer whales held in captivity tend to chew on their enclosures, such as walls and gates. Chewing on these hard, artificial surfaces promotes excessive tooth wear and breakage, which in turn provides an entry point for harmful bacteria and fungi. This chewing behaviour is classified as stereotypical behaviour which is a sign of major stress and compromised welfare status. Third, the small confinement in which captive killer whales are maintained exacerbates the severity of raking because a captive killer whale that is being raked has little room to escape the aggressor. Fourth, indefinite confinement in a small, artificial enclosure tends to induce chronic distress, which leads to elevated cortisol levels and impairs the functioning of a killer whale's immune system. Fifth, the routine administration of antibiotic and

² In this report, I use "orca" interchangeably with "killer whale."

antifungal drugs to a captive killer whale interferes with the fauna in the killer whale's gastrointestinal tract and also impairs the function of the kidney and liver.

V. INFORMATION CONSIDERED

19. In preparing my report, I considered information and documents produced by SeaWorld in this litigation. I also conducted my own research of scientific literature.

Additionally, I spoke with Dr. Ingrid Visser. [REDACTED]

[REDACTED]

[REDACTED] I understand that these spreadsheets are being provided with Dr. Visser's report as schedules 2, 4a, 7b, and 7c. I considered the information in these spreadsheets in forming my opinions.

20. I have considered information produced in this litigation including legal filings, deposition testimony, and documents produced in discovery. The information I have considered is listed in **Exhibit B**, as well as the footnotes and other citations in this report. I understand that discovery is ongoing in this matter. I reserve the ability to consider further discovery in this case, including, for example, additional expert reports, transcripts of depositions, and documents produced, if any.

VI. BACKGROUND ON KILLER WHALES

A. Killer whales are intelligent mammals with sophisticated social structures.

21. Killer whales are the largest member of the dolphin family weighing up to 6.6 tons for adult males and reaching a length of 9m. They are amongst the widest distributed

mammals in the world and hunt a large variety of prey, from fish to the largest whales, through birds and occasionally ungulates.³

22. They live in matrilineal social groups, which means that family units stay together for their entire lives and only mate with individuals from other family units to avoid inbreeding. Female orcas stop reproducing at 40 years of age but can get up to 80 years old, which is very similar to humans where women live way past their menopause. This is an indicator that females have a very important social role in the family units.^{4,5}

23. Killer whales are top predators in their environments and are amongst the most intelligent and cognitive animals in the world. Their communication is very complex and has been described as including dialects. These dialects and their elaborate hunting techniques—which are also transmitted vertically to their young—adds killer whales to the very limited number of animal species that have been described as having culture.⁶

24. Inside a matriline there is a clear hierarchy. Social interactions can lead to tooth raking, which is also observed in the wild. Nevertheless, tooth raking is not as intense and important in the wild as the aggressed killer whale can swim away and escape from the aggressing killer whale. This is not the case in captivity and it can lead to more frequent and more severe raking.

³ Ford JKB (2018) Killer Whale: *Orcinus orca*. In: Encyclopedia of Marine Mammals (Third Edition); Würsig B, Thewissen J.G.M., and Kovacs K.M. (Eds), Academic Press, pp 531-537, ISBN 9780128043271.

⁴ Baird, R.W. (2000) The killer whale: foraging specializations and group hunting; In: Cetacean Societies; Mann J, Connor RC, Tyack PL and Whitehead H (Eds), p 127-153.

⁵ Clark, S. T., and D. K. Odell. 1999. Allometric relationships and sexual dimorphism in captive killer whales (*Orcinus orca*). *Journal of Mammalogy* 80:777–785.

⁶ Whitehead, H., and Rendell, L. (2015). *The Cultural Lives of Whales and Dolphins*. Chicago; London: The University of Chicago Press.

B. Killer whales are highly adapted to their natural environment.

25. Killer whales can travel over approximately 150 kilometres per day in the wild.⁷

Furthermore, they make periodic long-distance migrations for thousands of kilometres, such as from Antarctic to subtropical waters and back.⁸

26. Being the top predator in their environment, they have developed highly elaborate hunting strategies to hunt collaboratively several different prey species, for example, the collaborative wave washing hunting of seals off an ice floe, the carousel feeding with herring, the intentional stranding to hunt fur and elephant seals, and the collaborative hunt of grey and humpback whale calves.⁹ In some areas like the west coast of the USA and South Africa, killer whales have developed hunting strategies to kill great white sharks to feed on their livers exclusively. These elaborate hunting strategies are transmitted from older killer whales to the young ones. This represents transmission of culture, a very rare trait only found in few highly cognitive animals.¹⁰

27. Traveling and hunting represents the biggest part of their days, and killer whales also have developed highly social behaviours in which they communicate together and interact with their environment together, like for example playing with prey, and rubbing on

⁷ Hoyt, E. (1990). Orca - the whale called killer. Ontario, Canada; Camden House.

⁸ Ford JKB (2018) Killer Whale: *Orcinus orca*. In: Encyclopedia of Marine Mammals (Third Edition); Würsig B , Thewissen J.G.M., and Kovacs K.M. (Eds), Academic Press, pp 531-537, ISBN 9780128043271

⁹ Ford JKB (2018) Killer Whale: *Orcinus orca*. In: Encyclopedia of Marine Mammals (Third Edition); Würsig B , Thewissen J.G.M., and Kovacs K.M. (Eds), Academic Press, pp 531-537, ISBN 9780128043271

¹⁰ Whitehead, H., and Rendell, L. (2015). *The Cultural Lives of Whales and Dolphins*. Chicago; London: The University of Chicago Press.

specific pebble beaches.¹¹ These behaviours are not possible in a captive setting, and they swim much less than in the wild, spending much more time at the surface.¹²

28. In the wild killer whales always feed on live prey or prey they have freshly killed, never on dead prey, whereas in captivity they are fed dead, deep-frozen fish.

VII. CAPTIVITY HARMS KILLER WHALES.

A. Captivity leads to harmful environmental traumas.

29. Because of their large size and the large distances killer whales swim in the wild, the small pools that captive killer whales are kept in restrain considerably their movements which leads to injuries against the walls and the gates they have to swim through.¹³ The ten captive killer whales presently at SeaWorld San Diego are held in a network of five connected pools with 9 gates and a total combined surface area of only approximately 43,000 square feet, which is approximately 4,000 square metres.¹⁴ This represents about 0.4% of the surface area of one square kilometre. The pools range in depth from 9 feet to 35 feet.

30. In addition, the water is treated chemically and can cause chemical burns to their eyes.

¹¹ Hoyt, E. (1990). Orca - the whale called killer. Ontario, Canada; Camden House.

¹² Jett, J. & Ventre, J. (2008). Orca (*Orcinus orca*) captivity and vulnerability to mosquito-transmitted viruses. *Journal of Marine Animals and Their Ecology*, 5(9), 9-16.

¹³ WDC et al. (2015). EU Zoo Inquiry 2011. Dolphinarium. A review of the keeping of whales and dolphins in captivity in the European Union and EC Directive 1999/22, relating to the keeping of wild animals in zoos. 2nd Edition.

¹⁴ SW000528 at p. 17; *see also, e.g.*, 20181128-USA-INV-D1-243, -251, -253, -275, -306, -874, -1111.

31. Captivity in marine parks also creates the risk that foreign bodies end up in the pool. These foreign bodies are harmful for captive killer whales because ingesting them can lead to gastrointestinal occlusions or perforations, which can lead to death.¹⁵

B. Captive killer whales chew on walls, which leads to harmful dental injuries and infections.

32. Being top predators with elaborate hunting techniques, and traveling and hunting representing the biggest part of their occupation, killer whales show boredom and frustration in captivity which can often lead to stereotypical behaviours. The pools killer whales are kept in can be compared to Victorian cages as they are completely devoid of natural enrichment: there are only concrete walls, there is no substrate, no waves or tides, no algae, no fish or other animals to chase or play with, and there is chlorine in the water. These barren environments in which they are confined for their entire lives lead to extreme boredom and frustration. These resulting stereotypical behaviours include staying motionless at the surface or the bottom of the pool for prolonged periods of time (which is unnatural in the wild), swimming in circles in the same direction which leads to the bending and collapsing of the dorsal fin in adult males, and other abnormal behaviours such as chewing on walls and metallic parts of the pool.¹⁶ This stereotypical repetitive behaviour leads to an abnormal wear of their teeth which can lead to dental and gum infections. These in turn are open gateways for infections as germs enter the

¹⁵ St. Aubin, D.J. and L.A. Dierauf. 2001. Stress and marine mammals. In: CRC Handbook of Marine Mammal Medicine. L.A. Dierauf and F.M.D. Gulland (eds). New York and London, CRC Press. pp. 253-269.

¹⁶ Jett, J. & Ventre, J. (2008). Orca (*Orcinus orca*) captivity and vulnerability to mosquito-transmitted viruses. *Journal of Marine Animals and Their Ecology*, 5(9), 9-16.

bloodstream and are transported to all the organs. The dental lesions act as entry sites for bacteria that cause bacteraemia, multi-systemic bacterial diseases, and/or septicaemia.¹⁷

C. Captivity exacerbates harmful raking among killer whales because there is no room for one killer whale to escape raking by an aggressive killer whale.

33. Because of their boredom and frustration, killer whales may also show exacerbated aggressive behaviour amongst conspecifics and against humans, as has been the case in SeaWorld institutions. Although conspecific aggressive behaviour is to some extent natural in the wild, this is exacerbated in captivity because the groups are created artificially and do not represent family units as is the case in the wild, and because the aggressed killer whales cannot escape the aggressive behaviour as the pools are extremely small. In the wild, the targeted killer whale always has a chance to escape the aggressions and thus the amount of raking and subsequent injuries are far less severe in the wild in comparison to captive settings. These captive settings can lead to the establishment of scapegoats which will be repetitively targeted by stronger individuals. Boredom and frustration can also exacerbate this kind of behaviour.

D. Captivity causes stress, which can lead to decreased immune function.

34. Boredom and frustration, as well as social stress due to repetitive aggressions and other factors will lead to chronic stress in some individuals. This leads to the production of cortisol in high levels. In extreme cases these situations can lead to distress. The chronic production of cortisol will lead to an impaired immune system (immunodeficiency) which will make the individual more susceptible to diseases it would be able to fight under normal

¹⁷ St. Aubin, D.J. and L.A. Dierauf. 2001. Stress and marine mammals. In: CRC Handbook of Marine Mammal Medicine. L.A. Dierauf and F.M.D. Gulland (eds). New York and London, CRC Press. pp. 253-269.

conditions.^{18, 19, 20, 21, 22, 23, 24} Thus the stress related to a captive environment can lead to an increase in the frequency and/or severity of diseases.

E. Routine administration of antibiotics and antifungal drugs during captivity can be harmful.

35. Drugs used therapeutically are metabolised by different organs, the most important one being the liver, and excreted mainly by the kidneys. Some drugs can have some degree of impact or even toxicity on the liver or/and the kidneys, their function being increased by the metabolism and excretion of these drugs. The repetitive and/or prolonged use of drugs increases this impact. In addition, this repetitive use can lead to the creation of resistant strains of bacteria or yeasts and fungi, which can lead to situations where animals will suffer infections

¹⁸ Dhabhar FS. Enhancing versus Suppressive Effects of Stress on Immune Function: Implications for Immunoprotection versus Immunopathology. *Allergy, Asthma, and Clinical Immunology : Official Journal of the Canadian Society of Allergy and Clinical Immunology*. 2008;4(1):2-11.

¹⁹ Dhabhar FS. Effects of stress on immune function: the good, the bad, and the beautiful. *Immunol Res*. 2014 May;58(2-3):193-210.

²⁰ Dhabhar F. S. 2000. Acute stress enhances while chronic stress suppresses skin immunity. The role of stress hormones and leukocyte trafficking. *Ann. N. Y. Acad. Sci.* 917:876–893.

²¹ Dhabhar F. S. 2009. Enhancing versus suppressive effects of stress on immune function: Implications for immunoprotection and immunopathology. *Neuroimmunomodulation* 16:300–317.

²² Glaser R, Kiecolt-Glaser JK. Stress-induced immune dysfunction: implications for health. *Nat Rev Immunol*. 2005;5:243–51.

²³ Shini S., G. R. Huff, A. Shini, P. Kaiser; Understanding stress-induced immunosuppression: Exploration of cytokine and chemokine gene profiles in chicken peripheral leukocytes, *Poultry Science*, Volume 89, Issue 4, 1 April 2010, Pages 841–851.

²⁴ Waples, K. A., & Gales, N. J. (2002). Evaluating and minimising social stress in the care of captive bottlenose dolphins (*Tursiops aduncus*). *Zoo Biology*, 21(1), 5-26.

with germs that will not be sensitive to common antibacterial or antifungal treatments.^{25, 26} This is both an issue for the health of the killer whales, and for human health. In addition, there is a vast literature on the hepatotoxicity (Idiosyncratic drug-induced liver injury - DILI) of drugs including antibiotic and antifungal drugs.²⁷ The most important agent involved in human medicine is Amoxicillin-clavulanate, [REDACTED]

36. It is my understanding as a veterinarian that when antibiotics and antifungals are administered to dolphins and killer whales over a prolonged period of time, liver and/or kidney values (creatinin & BUN) may increase. The surcharge of these organs as main metabolising and excreting sites can lead to their failure.

F. Captivity leads to harmful stereotypical behaviours.

37. Stereotypical behaviours are repetitive, identical movements, which have no purpose or function. They are considered as being a major infringement to the animal's welfare and are the result of major stress. These movements appear in animals suffering of deep boredom, unadapted captive environment, and/or frustration.

38. Lack of contact with conspecifics, inability to perform important species-specific behaviours (often referred to as "behavioral needs"), repeated and unfruitful attempts to solve a problem, reduced space or an environment that lacks stimuli, unadapted environment, the use of negative reinforcement techniques at training, or training to perform unnatural behaviours can

²⁵ Kilkkinen A, Pietinen P, Klaukka T, Virtamo J, Korhonen P, Adlercreutz H. (2002) Use of oral antimicrobials decreases serum enterolactone concentration. *American Journal of Epidemiology* 155(5):472-477.

²⁶ Kilkkinen A, Rissanen H, Klaukka T, Heliövaara M, Huovinen P, Männistö S, et al. (2008) Antibiotic use predicts an increased risk of cancer. *International Journal of Cancer* 123(9):2152-2155.

²⁷ Björnsson E. (2016) Hepatotoxicity by Drugs: The Most Common Implicated Agents. *International Journal of Molecular Sciences* 17(2):224

develop stereotypy. These stereotypical behaviours are defined as symptoms of a zoochosis or zoo psychosis, and represent signs of psychological distress. It is usually the result of a prolonged state of boredom, frustration and desolation.

39. In orcas, stereotypic behaviour generally includes logging, head bobbing, tongue playing, chewing on gates and bars, swimming in circles, and regurgitating food. In addition to being a sign of poor psychological and physiological welfare, these behaviours themselves can lead to health problems.²⁸

IX. SEAWORLD'S VETERINARY RECORDS DEMONSTRATE THAT CAPTIVITY HARMS KILLER WHALES.

A. SeaWorld's Identification of Veterinary Records for Its Killer Whales

40. I understand that in interrogatory no. 14, Plaintiffs asked SeaWorld to “[f]or each SeaWorld Orca, Describe any known or suspected mental or physical health issues, including (i) any instances of injury; (ii) any instances of illness that lasted more than 5 days; (iii) any medications administered or medical procedures (including dental procedures) performed; and (iv) the cause of death (if deceased) and whether any post-mortem study was conducted, and if so, when and by whom.”

41. I understand that SeaWorld responded to this interrogatory by identifying by Bates number “the killer whale veterinary records it maintains electronically.”²⁹ SeaWorld stated that these records “contain the information requested in sub-parts (i), (ii), and (iii) of [Interrogatory No. 14] for those whales for which SeaWorld has electronic veterinary records.”

²⁸ Jett, J. & Ventre, J. (2008). Orca (*Orcinus orca*) captivity and vulnerability to mosquito-transmitted viruses. *Journal of Marine Animals and Their Ecology*, 5(9), 9-16.

²⁹ SeaWorld's Second Supplemental Response to Plaintiffs' Second Set of Interrogatories, No. 14 (Oct. 31, 2018)

SeaWorld stated that the answers to these sub-parts “may be determined by examining, auditing, compiling, abstracting or summarizing the SeaWorld business records identified on Attachment A, and the burden of ascertaining or deriving the answer to these sub-parts will be the same for either party.”³⁰

42.

[REDACTED]

[REDACTED]. Amaya, Corky, Ikaika, Kalia, Keet, Makani, Nakai, Orkid, Shouka, and Ulises represent all of the killer whales presently held captive at SeaWorld San Diego. Kasatka was held captive at SeaWorld San Diego until she was euthanized in August 2017.

43. As explained further below, it is my opinion that each of these killer whales has been harmed by captivity.

B. Amaya

³⁰ SeaWorld’s Second Supplemental Response to Plaintiffs’ Second Set of Interrogatories, No. 14 (Oct. 31, 2018)

1. Biographical Details

44. [REDACTED].³¹ Her mother is Kalia. She is currently four years old.

2. Veterinary Records

[REDACTED]

45. [REDACTED]

[REDACTED]³² [REDACTED]

[REDACTED]

46. [REDACTED]

[REDACTED]³³

47. [REDACTED]

[REDACTED]

³¹ SW000515.

³² SW-AND0182641.

³³ SW-AND0182632.

48. [REDACTED]

[REDACTED] ³⁴ [REDACTED]

[REDACTED] ³⁵

[REDACTED]

49. [REDACTED]

[REDACTED] ³⁶ [REDACTED]

[REDACTED]

[REDACTED] ³⁷ [REDACTED]

[REDACTED]

[REDACTED] ³⁸

3. Summary

50. [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

51. [REDACTED]

[REDACTED]

[REDACTED]

C. Corky

³⁴ SW-AND0182617.

³⁵ SW-AND0182617.

³⁶ SW-AND0182608.

³⁷ SW-AND0182607.

³⁸ SW-AND0182607.

1. Biographical Details

52. [REDACTED]³⁹ [REDACTED]

[REDACTED]

[REDACTED]⁴⁰ [REDACTED]⁴¹

2. Veterinary Records

[REDACTED]

53. [REDACTED]

[REDACTED]⁴² [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

54. [REDACTED]

[REDACTED]⁴³ [REDACTED]

[REDACTED]

55. [REDACTED]⁴⁴

56. [REDACTED]

[REDACTED]

[REDACTED]⁴⁵

³⁹ SW000515.

⁴⁰ SW-AND0013225.

⁴¹ SW000515.

⁴² SW-AND0191013.

⁴³ SW-AND0191014.

⁴⁴ SW-AND0191017.

⁴⁵ SW-AND0191024.

57. [REDACTED]

[REDACTED] 46

58. [REDACTED]

[REDACTED] 47

[REDACTED]

59. [REDACTED] 48

[REDACTED]

[REDACTED]

60. [REDACTED]

[REDACTED] 49

[REDACTED]

61. [REDACTED]

[REDACTED] 50

62. [REDACTED]

[REDACTED] 51

63. [REDACTED]

[REDACTED] 52

[REDACTED]

⁴⁶ SW-AND0191024.

⁴⁷ SW-AND0191029.

⁴⁸ SW-AND0148992.

⁴⁹ SW-AND0191021.

⁵⁰ SW-AND0191012-13.

⁵¹ SW-AND0191016-17.

⁵² SW-AND0191023.

64. [REDACTED]

[REDACTED] .53 [REDACTED]

[REDACTED]

65. [REDACTED]

[REDACTED]

[REDACTED] .54 [REDACTED]

[REDACTED]

[REDACTED] .55

66. [REDACTED]

[REDACTED] .56

67. [REDACTED]

[REDACTED] .57 [REDACTED] .58

3. Summary

68. [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

⁵³ SW-AND0191025.

⁵⁴ SW-AND0191025.

⁵⁵ SW-AND0191026.

⁵⁶ SW-AND0191026.

⁵⁷ SW-AND0191028.

⁵⁸ SW-AND0191028

- [REDACTED]

69. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

D. Ikaika

1. Biographical Details

70. [REDACTED]⁶⁰ In 2006, SeaWorld transferred Ikaika to a non-SeaWorld park. He has been held captive at SeaWorld San Diego since 2011. His mother is Katina. He is currently 16 years old.

2. Veterinary Records

[REDACTED]

71. [REDACTED]

[REDACTED]⁶¹ [REDACTED]

[REDACTED]

72. [REDACTED]

[REDACTED]⁶²

⁵⁹ SW-AND0191016.

⁶⁰ SW000515.

⁶¹ SW047253.

⁶² SW047248.

73. [REDACTED]

[REDACTED]⁶³

74. [REDACTED]

[REDACTED]⁶⁴

75. [REDACTED]

[REDACTED]⁶⁵

76. [REDACTED]

[REDACTED]⁶⁶ [REDACTED]

[REDACTED]

77. [REDACTED]

[REDACTED]⁶⁷

78. [REDACTED]

[REDACTED]⁶⁸

[REDACTED]

79. [REDACTED]

[REDACTED]⁶⁹

80. [REDACTED]⁷⁰

[REDACTED]

⁶³ SW047246.

⁶⁴ SW047244.

⁶⁵ SW047239.

⁶⁶ SW047237.

⁶⁷ SW047241.

⁶⁸ SW-AND0191031.

⁶⁹ SW-AND0191031.

⁷⁰ SW-AND0191031.

81. [REDACTED]

[REDACTED].⁷¹

82. [REDACTED]

[REDACTED].⁷² [REDACTED]

[REDACTED]⁷³

83. [REDACTED]

[REDACTED].⁷⁴

84. [REDACTED]

[REDACTED].⁷⁵ [REDACTED]

[REDACTED]

85. [REDACTED]

[REDACTED].⁷⁶

86. [REDACTED]

[REDACTED]⁷⁷ [REDACTED]

87. [REDACTED].⁷⁸ [REDACTED]

[REDACTED].⁷⁹ [REDACTED]

⁷¹ SW-AND0191033.

⁷² SW-AND0191033.

⁷³ SW-AND0191033.

⁷⁴ SW-AND0191034, SW-AND0191035.

⁷⁵ SW-AND0191037.

⁷⁶ SW-AND0191038.

⁷⁷ SW-AND0183229.

⁷⁸ SW-AND0183303; SW-AND0183314;

⁷⁹ SW-AND0183336.

[REDACTED]

[REDACTED] .80

[REDACTED]

88. [REDACTED] .81 [REDACTED]

[REDACTED] .82 [REDACTED]

[REDACTED] .83 [REDACTED]

[REDACTED] .84 [REDACTED]

[REDACTED] .85 [REDACTED]

[REDACTED] .86 [REDACTED]

[REDACTED] .87 [REDACTED]

[REDACTED] .88

89. [REDACTED]

[REDACTED]

[REDACTED] .89 [REDACTED]

90. [REDACTED]

[REDACTED] .90 [REDACTED] .91 [REDACTED]

⁸⁰ SW-AND0183409–SW-AND0183496.

⁸¹ SW-AND0191036.

⁸² SW-AND0191038.

⁸³ SW-AND0191039.

⁸⁴ SW-AND0191040.

⁸⁵ SW-AND0191042.

⁸⁶ SW-AND0191043.

⁸⁷ SW-AND0191044.

⁸⁸ SW-AND0191045.

⁸⁹ SW-AND0191046.

⁹⁰ SW-AND0183303.

⁹¹ SW-AND0183360.

[REDACTED] 92 [REDACTED]

[REDACTED] 93 [REDACTED] 94 [REDACTED]

[REDACTED] 95 [REDACTED]

[REDACTED] 96 [REDACTED] 97 [REDACTED] 98

[REDACTED]

91. [REDACTED]

[REDACTED] 99 [REDACTED]

[REDACTED]

3. Summary

92. [REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED] 100

⁹² SW-AND0183362.

⁹³ SW-AND0183383.

⁹⁴ SW-AND0183469.

⁹⁵ SW-AND0183479.

⁹⁶ SW-AND0183487.

⁹⁷ SW-AND0183501.

⁹⁸ SW-AND0183511.

⁹⁹ SW-AND0183218.

¹⁰⁰ SW-AND0191032.

93. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].¹⁰¹

E. Kalia

1. Biographical Details

94. [REDACTED].¹⁰² Her mother is Kasatka. She is 14 years old.

2. Veterinary Records

[REDACTED]

95. [REDACTED]

[REDACTED].¹⁰³

96. [REDACTED]

[REDACTED].¹⁰⁴

97. [REDACTED]

[REDACTED].¹⁰⁵

98. [REDACTED]

[REDACTED].¹⁰⁶

¹⁰¹ [REDACTED]. E.g., SW-AND0183306; SW-AND0183299.

¹⁰² SW000515.

¹⁰³ SW-AND0191064.

¹⁰⁴ SW-AND0191066.

¹⁰⁵ SW-AND0191069.

¹⁰⁶ SW-AND0191073.

99. [REDACTED]

[REDACTED]

[REDACTED]¹⁰⁷

100. [REDACTED]

[REDACTED]

[REDACTED]¹⁰⁸

101. [REDACTED]

[REDACTED]¹⁰⁹ [REDACTED]

[REDACTED]

102. [REDACTED]

[REDACTED]¹¹⁰

[REDACTED]

103. [REDACTED]

[REDACTED]¹¹¹

104. [REDACTED]

[REDACTED]¹¹²

105. [REDACTED]

[REDACTED]¹¹³

¹⁰⁷ SW-AND0191074.

¹⁰⁸ SW-AND0191078.

¹⁰⁹ SW-AND0191085.

¹¹⁰ SW-AND0183704; SW-AND0183696.

¹¹¹ SW-AND0191062.

¹¹² SW-AND0191067.

¹¹³ SW-AND0191071.

106. [REDACTED] .114

107. [REDACTED] .115

[REDACTED]

108. [REDACTED] .116 [REDACTED]

[REDACTED]

[REDACTED] .117 [REDACTED] .118 [REDACTED]

[REDACTED] .119 [REDACTED]

[REDACTED] .120

109. [REDACTED]

[REDACTED] 121 [REDACTED]

[REDACTED]

[REDACTED] .122 [REDACTED] .123

110. [REDACTED]

[REDACTED] .124

111. [REDACTED]

[REDACTED] 125

114 SW-AND0191075.
 115 SW-AND0191080.
 116 SW-AND0191053.
 117 SW-AND0191055.
 118 SW-AND0191056.
 119 SW-AND0191057.
 120 SW-AND0191059.
 121 SW-AND0191062.
 122 SW-AND0191064.
 123 SW-AND0191066.
 124 SW-AND0191067.
 125 SW-AND0191068.

112. [REDACTED]

[REDACTED] .126 [REDACTED]

[REDACTED] .127

113. [REDACTED]

[REDACTED] .128 [REDACTED]

[REDACTED]

114. [REDACTED]

[REDACTED] .129 [REDACTED] .130

115. [REDACTED]

[REDACTED]

116. [REDACTED]

[REDACTED] .131

117. [REDACTED]

[REDACTED]

[REDACTED] .132

118. [REDACTED]

[REDACTED] .133

¹²⁶ SW-AND0191068.

¹²⁷ SW-AND0191068.

¹²⁸ SW-AND0191069.

¹²⁹ SW-AND0191071.

¹³⁰ SW-AND0191072.

¹³¹ SW-AND0191078.

¹³² SW-AND0191082.

¹³³ SW-AND0191082.

119. [REDACTED]

[REDACTED] 134 [REDACTED]

[REDACTED] 135 [REDACTED]

[REDACTED] 136

[REDACTED]

[REDACTED] 137

3. Summary

120. [REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED] 138 [REDACTED] 139 [REDACTED] 140

- [REDACTED]

121. [REDACTED]

[REDACTED]

¹³⁴ SW-AND0183602.

¹³⁵ SW-AND0183600.

¹³⁶ SW-AND0183597.

¹³⁷ SW-AND0183592, SW-AND0183583, SW-AND0183580.

¹³⁸ SW-AND0191061.

¹³⁹ SW-AND0191063-64.

¹⁴⁰ SW-AND0191076.

[REDACTED]

F. Kasatka

1. Biographical Details

122. Kasatka's date of birth is not known. [REDACTED]

[REDACTED]

.141

2. Veterinary Records

123. [REDACTED]

[REDACTED] 142

124. [REDACTED] 143

125. [REDACTED] 144

126. [REDACTED]

[REDACTED]

145

¹⁴¹ SW-AND00515.

¹⁴² SW-AND0191089.

¹⁴³ SW-AND0191094.

¹⁴⁴ SW-AND0191109.

¹⁴⁵ SW-AND0191115.

127. [REDACTED]

[REDACTED] 146

128. [REDACTED] 147

[REDACTED]

129. [REDACTED]

[REDACTED] 148

[REDACTED]

[REDACTED]

130. [REDACTED]

[REDACTED] 149

131. [REDACTED]

[REDACTED] 150

132. [REDACTED] 151

133. [REDACTED]

[REDACTED] 152

134. [REDACTED] 153

¹⁴⁶ SW-AND0191119.

¹⁴⁷ SW-AND0271923.

¹⁴⁸ SW-AND0191091; SW-AND0191109.

¹⁴⁹ SW-AND0191099.

¹⁵⁰ SW-AND0191100.

¹⁵¹ SW-AND0191101.

¹⁵² SW-AND0191102.

¹⁵³ SW-AND0191103.

135. [REDACTED]

[REDACTED] 154

136. [REDACTED]

[REDACTED] 155

137. [REDACTED]

[REDACTED] 156

138. [REDACTED]

[REDACTED] 157

139. [REDACTED]

[REDACTED] 158

[REDACTED]

140. [REDACTED]

[REDACTED] 159

141. [REDACTED] 160

142. [REDACTED]

[REDACTED] 161

154 SW-AND0191104.
 155 SW-AND0191105.
 156 SW-AND0191106.
 157 SW-AND0191107.
 158 SW-AND0191108.
 159 SW-AND0191110.
 160 SW-AND0191111.
 161 SW-AND0191112.

143. [REDACTED]

[REDACTED]¹⁶²

[REDACTED]

144. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]¹⁶³

145. [REDACTED]¹⁶⁴

146. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]¹⁶⁵ [REDACTED]¹⁶⁶

147. [REDACTED]¹⁶⁷

148. [REDACTED]

[REDACTED]

[REDACTED]

149. [REDACTED]

[REDACTED]

¹⁶² SW-AND0191112.

¹⁶³ SW-AND0184273.

¹⁶⁴ SW-AND0184270.

¹⁶⁵ SW-AND0184248.

¹⁶⁶ SW-AND0184249.

¹⁶⁷ SW-AND0184241.

[REDACTED]

168

150. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 169

151. [REDACTED] 170 [REDACTED]

[REDACTED]

152. [REDACTED]

[REDACTED]

153. [REDACTED] 171

154. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 172 [REDACTED] 173

¹⁶⁸ SW-AND0184214.

¹⁶⁹ SW-AND0184210.

¹⁷⁰ SW-AND0184206.

¹⁷¹ SW-AND0184198.

¹⁷² SW-AND0184168.

¹⁷³ SW-AND0184169.

155. [REDACTED]

[REDACTED]

[REDACTED] 174 [REDACTED] 175

156. [REDACTED]

[REDACTED]

157. [REDACTED] 176 [REDACTED]

[REDACTED]

158. [REDACTED] 177

159. [REDACTED] 178 [REDACTED]

[REDACTED]

160. [REDACTED]

[REDACTED] 179 [REDACTED]

[REDACTED] 180

161. [REDACTED]

¹⁷⁴ SW-AND0184140.

¹⁷⁵ SW-AND0184141.

¹⁷⁶ SW-AND0184609.

¹⁷⁷ SW-AND0184474.

¹⁷⁸ SW-AND0184318.

¹⁷⁹ SW-AND0271733.

¹⁸⁰ SW-AND0271735.

162. [REDACTED]

[REDACTED]

[REDACTED] .181

163. [REDACTED]

[REDACTED]

[REDACTED] .182

164. [REDACTED]

[REDACTED] .183

165. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] .184

166. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁸¹ SW-AND0184353.

¹⁸² SW-AND0184352.

¹⁸³ SW-AND0184349.

¹⁸⁴ SW-AND0272016.

[REDACTED]

[REDACTED]

[REDACTED] 185

167. [REDACTED]

[REDACTED] 186

3. Summary

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED] 187
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

168. [REDACTED]

[REDACTED]

¹⁸⁵ SW-AND0271883.

¹⁸⁶ SW-AND0271881.

¹⁸⁷ SW-AND0191089; SW-AND0148992.

[REDACTED]

[REDACTED]

[REDACTED]

G. Keet

1. Biographical Details

169. [REDACTED].¹⁸⁸ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] He is currently 26 years old.

2. Veterinary Records

[REDACTED]

170. [REDACTED]

[REDACTED].¹⁸⁹

171. [REDACTED]

[REDACTED].¹⁹⁰

172. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].¹⁹¹

¹⁸⁸ SW000515.

¹⁸⁹ SW046901.

¹⁹⁰ SW046897.

¹⁹¹ SW-AND0191259.

173. [REDACTED]

[REDACTED] 192

174. [REDACTED]

[REDACTED] 193

175. [REDACTED]

[REDACTED]

[REDACTED] 194

176. [REDACTED]

[REDACTED] 195

177. [REDACTED]

[REDACTED] 196

178. [REDACTED]

[REDACTED] 197

179. [REDACTED]

[REDACTED] 198

180. [REDACTED]

[REDACTED] 199

192 SW046904.
 193 SW046903.
 194 SW046901.
 195 SW046901.
 196 SW046901.
 197 SW046900.
 198 SW046899.
 199 SW046898.

181. [REDACTED]

[REDACTED] 200

182. [REDACTED] 201

183. [REDACTED] 202

184. [REDACTED] 203

185. [REDACTED] 204

186. [REDACTED] 205

187. [REDACTED] 206

188. [REDACTED] 207 [REDACTED]

[REDACTED] 208 [REDACTED]

189. [REDACTED] 209 [REDACTED]

[REDACTED] 210

190. [REDACTED] 211

[REDACTED] 212

²⁰⁰ SW-AND0191239.

²⁰¹ SW-AND0191239.

²⁰² SW-AND0191240.

²⁰³ See SW-AND0191240.

²⁰⁴ SW-AND0191240.

²⁰⁵ SW-AND0191241.

²⁰⁶ SW-AND0191242.

²⁰⁷ SW-AND0191246.

²⁰⁸ SW-AND0191247.

²⁰⁹ SW-AND0191248.

²¹⁰ SW-AND0191249.

²¹¹ SW-AND0191255.

²¹² SW-AND0191256.

191. [REDACTED] ²¹³ [REDACTED]

[REDACTED] ²¹⁴

192. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] ²¹⁵ [REDACTED]

[REDACTED]

3. Summary

193. [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED] ¹⁶
- [REDACTED]
- [REDACTED]

194. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

²¹³ SW-AND0191256

²¹⁴ SW-AND0191257.

²¹⁵ SW-AND0191258.

²¹⁶ SW-AND0148992

H. Makani

1. Biographical Details

195. [REDACTED]²¹⁷ His mother is Kasatka. He is almost six years old.

2. Veterinary Records

[REDACTED]

196. [REDACTED]²¹⁸

197. [REDACTED]²¹⁹

[REDACTED]

198. [REDACTED]²²⁰

199. [REDACTED]²²¹

200. [REDACTED]²²²

[REDACTED]²²³

3. Summary

201. [REDACTED]

²¹⁷ SW000515.

²¹⁸ SW-AND0186420.

²¹⁹ SW-AND0186430.

²²⁰ SW-AND0186390.

²²¹ SW-AND0186393.

²²² SW-AND0186395.

²²³ SW-AND0186396.

202. [REDACTED]

[REDACTED]

[REDACTED]

I. Nakai

1. Biographical Details

203. [REDACTED]

[REDACTED]²²⁴

2. Veterinary Records

[REDACTED]

204. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]²²⁵ [REDACTED]

[REDACTED]²²⁶ Huffington Post published the following

photos of Nakai's injury:²²⁷

²²⁴ SW000515.

²²⁵ SW-AND0191334.

²²⁶ SW-AND0191339.

²²⁷ https://www.huffingtonpost.com/2012/10/01/orca-injured-seaworld-san-diego_n_1929151.html



205.

Ingrid N. Visser, Ph.D./Orca Research Trust



206.

207.

[REDACTED] 228

208.

209.

[REDACTED] 230

210.

[REDACTED] 231

²²⁸ SW-AND0187015.

²²⁹ SW-AND0191316.

²³⁰ SW-AND0191317.

²³¹ SW-AND0191317.

211. [REDACTED]

[REDACTED] 232

212. [REDACTED]

[REDACTED]

[REDACTED] 233

213. [REDACTED]

[REDACTED] 234

214. [REDACTED]

[REDACTED] 235 [REDACTED]

[REDACTED] 236 [REDACTED]

215. [REDACTED]

[REDACTED] 237

216. [REDACTED]

[REDACTED]

[REDACTED] 238 [REDACTED]

[REDACTED]

[REDACTED]

²³² SW-AND0191316.

²³³ SW-AND0191321.

²³⁴ SW-AND0191325.

²³⁵ SW-AND0191328.

²³⁶ SW-AND0191329.

²³⁷ SW-AND0191329.

²³⁸ SW-AND0191332.

217. [REDACTED]

[REDACTED] .239 [REDACTED]

[REDACTED] .240

218. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] .241

[REDACTED]

219. [REDACTED] .242 [REDACTED]

[REDACTED] .243 [REDACTED]

[REDACTED]

[REDACTED] .244

220. [REDACTED]

[REDACTED] .245 [REDACTED]

[REDACTED] .246

²³⁹ SW-AND0191339.

²⁴⁰ SW-AND0191346.

²⁴¹ SW-AND0191347; SW-AND0187066.

²⁴² SW-AND0191317.

²⁴³ SW-AND0191318.

²⁴⁴ SW-AND0191320.

²⁴⁵ SW-AND0191322.

²⁴⁶ SW-AND0191323.

221. [REDACTED] 247 [REDACTED]

[REDACTED]

[REDACTED] 248 [REDACTED]

222. [REDACTED]

[REDACTED] 249 [REDACTED]

[REDACTED] 250 [REDACTED]

223. [REDACTED]

[REDACTED] 251

224. [REDACTED]

[REDACTED] 252 [REDACTED]

[REDACTED]

225. [REDACTED]

[REDACTED] 253

226. [REDACTED]

[REDACTED]

[REDACTED] 254

247 SW-AND0191323.
 248 SW-AND0191324.
 249 SW-AND0191325.
 250 SW-AND0191326.
 251 SW-AND0191327.
 252 SW-AND0191327-28.
 253 SW-AND0191329.
 254 SW-AND0191332.

227. [REDACTED]

[REDACTED] .255 [REDACTED]

[REDACTED] .256

228. [REDACTED]

[REDACTED] .257 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] .258 [REDACTED]

[REDACTED] .259 [REDACTED]

[REDACTED]

[REDACTED] .260

229. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] .261

²⁵⁵ SW-AND0191334.

²⁵⁶ SW-AND0191337.

²⁵⁷ SW-AND0191339.

²⁵⁸ SW-AND0191340.

²⁵⁹ SW-AND0191343.

²⁶⁰ SW-AND0191346.

²⁶¹ SW-AND0191347; SW-AND0187066.

230. [REDACTED]

[REDACTED]

[REDACTED]²⁶² [REDACTED]²⁶³

231. [REDACTED]²⁶⁴

232. [REDACTED]²⁶⁵

233. [REDACTED]²⁶⁶

234. [REDACTED]²⁶⁷

235. [REDACTED]²⁶⁸

236. [REDACTED]²⁶⁹

237. [REDACTED]²⁷⁰

238. [REDACTED]²⁷¹

239. [REDACTED]²⁷²

3. Summary

240. [REDACTED]

[REDACTED]

- [REDACTED]

²⁶² SW-AND0187060.

²⁶³ SW-AND0187036.

²⁶⁴ SW-AND0187202.

²⁶⁵ SW-AND0187196.

²⁶⁶ SW-AND0187184.

²⁶⁷ SW-AND0187171.

²⁶⁸ SW-AND0187166.

²⁶⁹ SW-AND0187158.

²⁷⁰ SW-AND0187154.

²⁷¹ SW-AND0187148.

²⁷² SW-AND0187142.

- [REDACTED] ²⁷³
- [REDACTED]
- [REDACTED]

241. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] ²⁷⁴ [REDACTED]

[REDACTED]

J. Orkid

1. Biographical Details

242. [REDACTED] ²⁷⁵ Her mother is

Kandu 3. She is 30 years old.

2. Veterinary Records

[REDACTED]

²⁷³ SW-AND0148992.

²⁷⁴ SW-AND0191344.

²⁷⁵ SW000515.

243. [REDACTED]

[REDACTED]

[REDACTED] 276

244. [REDACTED]

[REDACTED] 277

245. [REDACTED]

[REDACTED] 278

[REDACTED]

246. [REDACTED] 279

247. [REDACTED] 280

248. [REDACTED] 281

249. [REDACTED]

[REDACTED] 282

250. [REDACTED]

[REDACTED] 283

251. [REDACTED]

[REDACTED]

²⁷⁶ SW-AND0191407.

²⁷⁷ SW-AND0191415.

²⁷⁸ SW-AND0188246.

²⁷⁹ SW047353.

²⁸⁰ SW047349.

²⁸¹ SW047351.

²⁸² SW047351.

²⁸³ SW-AND0191395.

[REDACTED] 284 [REDACTED]

[REDACTED]

[REDACTED] 285

252. [REDACTED] 286

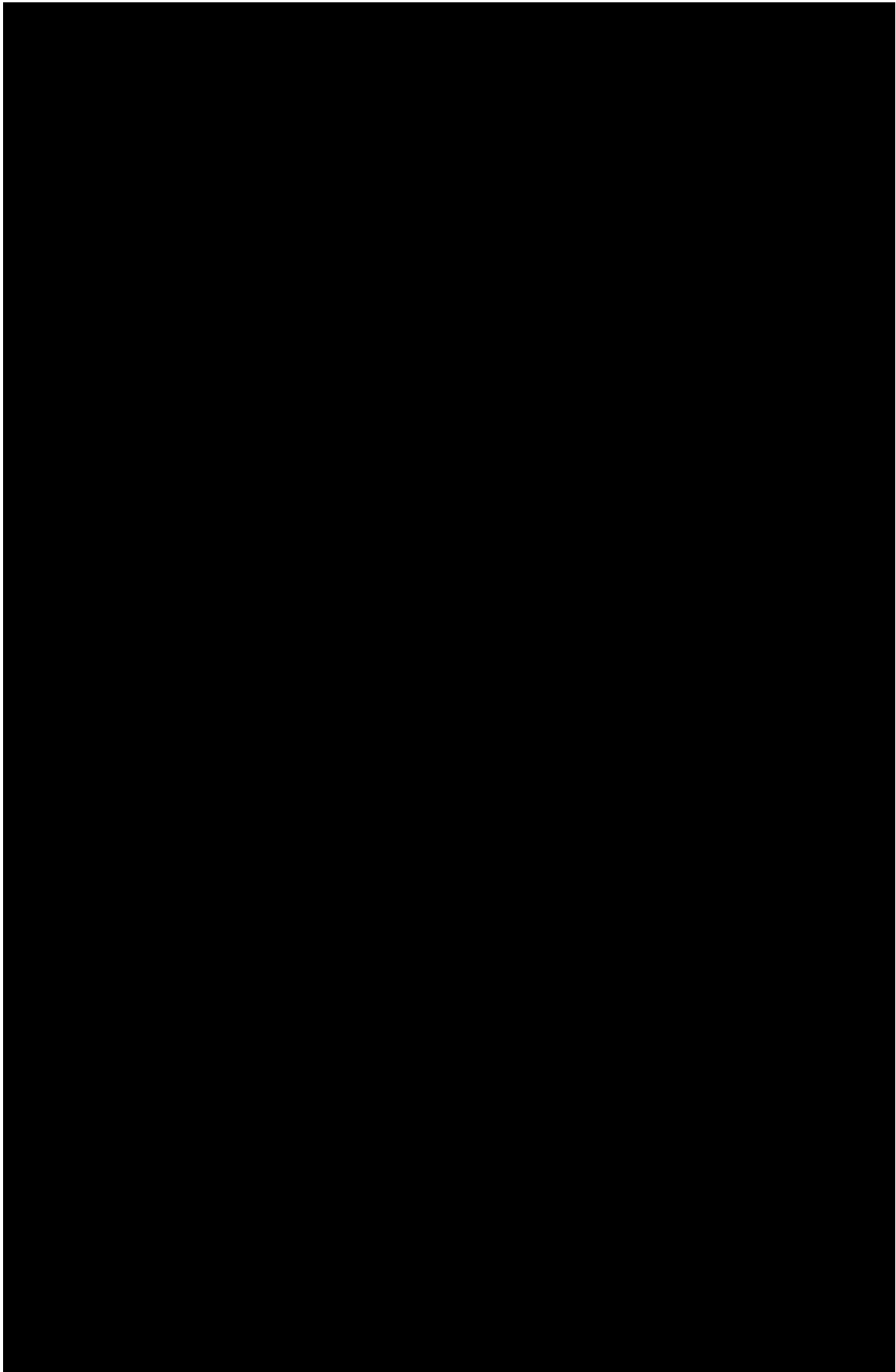
253. [REDACTED] 287

²⁸⁴ SW-AND0148992.

²⁸⁵ SW-AND0148992.

²⁸⁶ SW-AND0188170.

²⁸⁷ SW-AND0188283.



254.

255. [REDACTED]

[REDACTED]

[REDACTED] .288

256. [REDACTED]

[REDACTED] .289

257. [REDACTED]

[REDACTED] 290 [REDACTED]

[REDACTED]

258. [REDACTED] .291 [REDACTED]

[REDACTED]

259. [REDACTED]

[REDACTED] .292

260. [REDACTED]

[REDACTED]

[REDACTED] .293 [REDACTED] .294

[REDACTED]

²⁸⁸ SW047348.

²⁸⁹ SW-AND0191395.

²⁹⁰ SW-AND0191397.

²⁹¹ SW-AND0191402.

²⁹² SW-AND0191403.

²⁹³ SW-AND0191404.

²⁹⁴ SW-AND0191405.

261. [REDACTED]

[REDACTED] 295

262. [REDACTED]

[REDACTED] 296

263. [REDACTED] 297 [REDACTED]

[REDACTED] 298

264. [REDACTED]

[REDACTED] 299

265. [REDACTED]

[REDACTED] 300

[REDACTED]

266. [REDACTED] 301 [REDACTED]

[REDACTED] 302 [REDACTED]

[REDACTED] 303 [REDACTED]

[REDACTED] 304

267. [REDACTED] 305

295 SW-AND0191407.
 296 SW-AND0191410.
 297 SW-AND0191412-13.
 298 SW-AND0191413.
 299 SW-AND0191414.
 300 SW-AND0191416.
 301 SW-AND0188100.
 302 SW-AND0188105.
 303 SW-AND0188111.
 304 SW-AND0188117.
 305 SW-AND0188110

268. [REDACTED] 306

269. [REDACTED]

[REDACTED] 307 [REDACTED]

[REDACTED]

270. [REDACTED] 308

271. [REDACTED]

[REDACTED]

[REDACTED] 309 [REDACTED]

[REDACTED] 310

272. [REDACTED] 311

273. [REDACTED]

[REDACTED] 312 [REDACTED]

[REDACTED] 313

274. [REDACTED]

[REDACTED] 314 [REDACTED]

[REDACTED] 315 [REDACTED] 316

306 SW-AND0188112

307 SW-AND0188120.

308 SW-AND0188133.

309 SW-AND0188143.

310 SW-AND0188159.

311 SW-AND0188152

312 SW-AND0188163.

313 SW-AND0188179.

314 SW-AND0188216.

315 SW-AND0188223.

316 SW-AND0188225.

275.

[REDACTED]

276.

[REDACTED]

277.

[REDACTED]

279.

[REDACTED]

280.

[REDACTED]

281.

³¹⁷ SW-AND0188246.
³¹⁸ SW-AND0188250.
³¹⁹ SW-AND0188277.
³²⁰ SW-AND0188271
³²¹ SW-AND0188301.
³²² SW-AND0188306.
³²³ SW-AND0188315.
³²⁴ SW-AND0188288.
³²⁵ SW-AND0188340.
³²⁶ SW-AND0188345.
³²⁷ SW-AND0188339.

282. [REDACTED] 328

283. [REDACTED] 329

284. [REDACTED] 330

285. [REDACTED] 331

286. [REDACTED] 332

287. [REDACTED] 333

288. [REDACTED] 334

3. Summary

289. [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

³²⁸ SW-AND0188344.

³²⁹ SW-AND0188342.

³³⁰ SW-AND0188349.

³³¹ SW-AND0188351.

³³² SW-AND0188354.

³³³ SW-AND0188362.

³³⁴ SW-AND0188366.

290. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

K. Shouka

1. Biographical Details

291. [REDACTED]³³⁵ [REDACTED]

[REDACTED]³³⁶ [REDACTED]

[REDACTED]³³⁷ [REDACTED]³³⁸ [REDACTED]

[REDACTED]. Shouka is almost 26 years old.

2. Veterinary Records

[REDACTED]

292. [REDACTED]

[REDACTED]

[REDACTED]³³⁹

293. [REDACTED]

[REDACTED]³⁴⁰

294. [REDACTED]³⁴¹

³³⁵ SW000515.
³³⁶ SW047144.
³³⁷ SW047058.
³³⁸ SW000515.
³³⁹ SW-AND0140501.
³⁴⁰ SW-AND0140507.
³⁴¹ SW-AND0140550.

295. [REDACTED]

[REDACTED] 342

296. [REDACTED]

[REDACTED] 343

297. [REDACTED]

[REDACTED] 344

298. [REDACTED]

[REDACTED] 345

299. [REDACTED]

[REDACTED] 346 [REDACTED]

[REDACTED] 347 [REDACTED]

[REDACTED]

[REDACTED] 348

300. [REDACTED]

[REDACTED] 349

³⁴² SW047144; SW047070.

³⁴³ SW047069.

³⁴⁴ SW047068.

³⁴⁵ SW047065.

³⁴⁶ SW047065.

³⁴⁷ SW047064.

³⁴⁸ SW047064.

³⁴⁹ SW047062.

301. [REDACTED]

[REDACTED] 350

302. [REDACTED]

[REDACTED] 351

303. [REDACTED] 352

304. [REDACTED]

[REDACTED] 353 [REDACTED]

[REDACTED] 354 [REDACTED]

[REDACTED] 355

305. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 356

306. [REDACTED]

[REDACTED] 357

307. [REDACTED]

[REDACTED] 358

350 SW047061.

351 SW047059.

352 SW047056.

353 SW-AND0140496.

354 SW-AND0140497.

355 SW-AND0140499.

356 SW-AND0140500.

357 SW-AND0140505.

358 SW-AND0140514.

308. [REDACTED]

309. [REDACTED]

[REDACTED] 359 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 360

310. [REDACTED]

[REDACTED] 361 [REDACTED]

[REDACTED] 362

311. [REDACTED] 363 [REDACTED]

[REDACTED] 364 [REDACTED]

[REDACTED] 365

312. [REDACTED]

[REDACTED]

[REDACTED] 366

359 SW-AND0140523.
 360 SW-AND0140523.
 361 SW-AND0140523-35.
 362 SW-AND0140530.
 363 SW-AND0140540.
 364 SW-AND0140592.
 365 SW-AND0140559-63
 366 SW-AND010564.

313. [REDACTED]

[REDACTED] 367 [REDACTED]

[REDACTED]

314. [REDACTED] 368

315. [REDACTED]

[REDACTED] 369

[REDACTED]

316. [REDACTED]

[REDACTED] 370 [REDACTED]

[REDACTED] 371

317. [REDACTED]

[REDACTED]

[REDACTED] 372

318. [REDACTED]

[REDACTED] 373 [REDACTED]

[REDACTED] 374

367 SW-AND0140569.
 368 SW-AND0140578.
 369 SW-AND0140582.
 370 SW-AND0140493.
 371 SW-AND0140497.
 372 SW-AND0140503.
 373 SW-AND0140505.
 374 SW-AND0140506.

319. [REDACTED]

[REDACTED] 375

320. [REDACTED] 376

[REDACTED] 377 [REDACTED]

321. [REDACTED]

[REDACTED] 378 [REDACTED]

[REDACTED]

322. [REDACTED]

[REDACTED] 379 [REDACTED]

[REDACTED] 380 [REDACTED]

[REDACTED]

[REDACTED] 381 [REDACTED]

[REDACTED] 382 [REDACTED] 383 [REDACTED]

[REDACTED] 384

323. [REDACTED]

[REDACTED] 385

375 SW-AND0140511.
376 SW-AND0140515-16
377 SW-AND0140517.
378 SW-AND0140517.
379 SW-AND0140521.
380 SW-AND0140521-26.
381 SW-AND0140527.
382 SW-AND0140531
383 SW-AND0140533.
384 SW-AND0140534.
385 SW-AND0140541.

324. [REDACTED]

[REDACTED] 386 [REDACTED]

325. [REDACTED]

[REDACTED] 387

[REDACTED] 388

326. [REDACTED]

[REDACTED] 389 [REDACTED]

[REDACTED]

[REDACTED] 390

3. Summary

327. [REDACTED]

[REDACTED]

- [REDACTED] 391

- [REDACTED]

328. [REDACTED]

[REDACTED]

[REDACTED]

³⁸⁶ SW-AND0140555-56

³⁸⁷ SW-AND0140558.

³⁸⁸ SW-AND0140559.

³⁸⁹ SW-AND0188726.

³⁹⁰ SW-AND0188727.

³⁹¹ SW-AND0148992.

L. Ulises

1. Biographical Information

329. Ulises's date of birth is not known. [REDACTED]

[REDACTED] .392 [REDACTED]

[REDACTED] .393 [REDACTED] .394

2. Veterinary Records

[REDACTED]

330. [REDACTED]

[REDACTED]

[REDACTED] .395

331. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] .396 [REDACTED]

[REDACTED] .397 [REDACTED]

[REDACTED] .398

[REDACTED]

³⁹² SW000515.

³⁹³ SW047388.

³⁹⁴ SW000515.

³⁹⁵ SW-AND0191666.

³⁹⁶ SW-AND0190401; SW-AND0190406.

³⁹⁷ SW-AND0190410.

³⁹⁸ SW-AND0190416.

332. [REDACTED] .399 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] .400

333. [REDACTED]

[REDACTED] .401

334. [REDACTED]

[REDACTED]

[REDACTED] .402

335. [REDACTED]

[REDACTED]

[REDACTED] .403

336. [REDACTED]

[REDACTED] .404

337. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] .405 [REDACTED]

³⁹⁹ SW-AND0191664.

⁴⁰⁰ SW-AND0191665.

⁴⁰¹ SW-AND0191668.

⁴⁰² SW-AND0191669.

⁴⁰³ SW-AND0191669.

⁴⁰⁴ SW-AND0191670.

⁴⁰⁵ SW-AND0191670.

[REDACTED]

[REDACTED]

[REDACTED] 406

338. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 407 [REDACTED]

[REDACTED]

339. [REDACTED] 408 [REDACTED]

[REDACTED] 409

340. [REDACTED]

[REDACTED]

[REDACTED] 410 [REDACTED]

[REDACTED] 411 [REDACTED]

[REDACTED] 412

341. [REDACTED]

[REDACTED]

342. [REDACTED] 413

⁴⁰⁶ Schmitt Dep. Tr. (Nov. 27, 2018), 83:10-14.

⁴⁰⁷ SW-AND0191670.

⁴⁰⁸ SW-AND0190387.

⁴⁰⁹ SW-AND0190389.

⁴¹⁰ SW-AND0190391.

⁴¹¹ SW-AND0190394

⁴¹² SW-AND0190399

⁴¹³ SW-AND0190400.

343. [REDACTED]

[REDACTED]⁴¹⁴

344. [REDACTED]

[REDACTED]⁴¹⁵

345. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]⁴¹⁶ [REDACTED]

346. [REDACTED]

[REDACTED]

[REDACTED]⁴¹⁷ [REDACTED]

[REDACTED]⁴¹⁸

347. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]⁴¹⁹

[REDACTED]

⁴¹⁴ SW-AND0190444.

⁴¹⁵ SW-AND0190454.

⁴¹⁶ SW-AND0190470.

⁴¹⁷ SW-AND0190480.

⁴¹⁸ SW-AND0190486.

⁴¹⁹ SW-AND0190523.

348. [REDACTED] .420 [REDACTED]

[REDACTED] .421

[REDACTED]

349. [REDACTED]

[REDACTED] .422

350. [REDACTED]

[REDACTED] .423

351. [REDACTED]

[REDACTED] .424 [REDACTED] .425

352. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] .426 [REDACTED]

[REDACTED] .427 [REDACTED]

[REDACTED] .428 [REDACTED]

[REDACTED]

⁴²⁰ SW-AND0191653, SW-AND0191656.

⁴²¹ SW-AND0191657.

⁴²² SW-AND0191661-62.

⁴²³ SW-AND0191667-68.

⁴²⁴ SW-AND0190567.

⁴²⁵ SW-AND0190575.

⁴²⁶ SW-AND0190580.

⁴²⁷ SW-AND0190584.

⁴²⁸ SW-AND0190585.

[REDACTED]

[REDACTED] 429 [REDACTED]

[REDACTED] 430

353. [REDACTED]

[REDACTED] 431 [REDACTED]

[REDACTED] 432 [REDACTED] 433 [REDACTED]

[REDACTED] 434

3. Summary

354. [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED] 435

355. [REDACTED]

[REDACTED]

[REDACTED]

429 SW-AND0190591.
 430 SW-AND0190602.
 431 SW-AND0190605.
 432 SW-AND0190607.
 433 SW-AND0190609.
 434 SW-AND0190612.
 435 SW-AND0148992.

[REDACTED]

X. SEAWORLD’S RESPONSE TO INTERROGATORY NO. 5

356. I understand that the Plaintiffs asked SeaWorld to describe “all factual and scientific bases for the Captivity Misrepresentation of which SeaWorld is aware.” I understand that, in response, SeaWorld stated that SeaWorld understands “Captivity Statement” to mean “Captivity in general does not harm orcas.”⁴³⁶

357. In identifying support for the statement that “Captivity in general does not harm orcas,” SeaWorld asserted that “SeaWorld’s killer whales are content and well adapted to their homes, as evidenced by their physical condition, behavior and social interactions with each other and with training and caretaker personnel through exercise, play, and other enrichment activities, appetite, reproduction, health, and longevity.”

358. I disagree with SeaWorld’s assertion that SeaWorld’s killer whales are “content and well adapted to their homes.” [REDACTED]

[REDACTED]

⁴³⁶ SeaWorld’s Second Supplemental Response to Plaintiffs’ Second Set of Interrogatories (Oct. 31, 2018)

359. In identifying support for the statement that “Captivity in general does not harm orcas,” SeaWorld also asserts that captive killer whales at SeaWorld “do not face many plights encountered by wild killer whales, such as limited food availability; hunting by humans; confrontations with fishing, whale-watching, and other water craft; catastrophic environmental insults such as crude oil spills; and pollution (including persistent organic pollutants like polychlorinated biphenyls, dischlorodiphenyltrichloroethane, and Polybrominated diphenyl ethers).” I disagree that the presence of these risks in the wild proves that captivity in general does not harm killer whales. Captivity is harmful for killer whales for the reasons that I have explained throughout my report.

360. Furthermore, some of the harms in the wild that SeaWorld identifies are transitory, *e.g.*, fishing and whale-watching. Killer whales in the wild have the ability to evade these harms by moving away or diving further underwater. Captive killer whales, on the other hand, cannot escape their small, featureless pools. While [REDACTED]

[REDACTED]

[REDACTED]⁴³⁷ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]⁴³⁸ [REDACTED]

⁴³⁷ SW-AND0182617 [REDACTED]; SW-AND0183318 [REDACTED]; SW-AND0183706 [REDACTED]; SW-AND0186382 [REDACTED]; SW-AND0271923 [REDACTED].

⁴³⁸ SW-AND0191327.

[REDACTED]

[REDACTED] 439

XI. CONCLUSION

361. [REDACTED]

[REDACTED]

[REDACTED]

362. [REDACTED]

[REDACTED]

[REDACTED] 440

[REDACTED]

[REDACTED] 441

363. [REDACTED]

[REDACTED]

[REDACTED] 442

364. [REDACTED]

[REDACTED]

[REDACTED] 443

[REDACTED] 444

439 SW-AND0147792.

440 [REDACTED]
441 [REDACTED]

442 [REDACTED]
443 [REDACTED]

444 [REDACTED]
[REDACTED]

365.

[REDACTED]

[REDACTED]

[REDACTED] .⁴⁴⁵ [REDACTED]

[REDACTED]

366.

[REDACTED]

[REDACTED]. They are clear indicators of major stress and/or psychological distress. Chronic stress and distress have the capacity of lowering the immune system of the affected killer whales.

367. Based on all the materials I have reviewed to date, it is my opinion that SeaWorld’s statement that “captivity in general does not harm orcas” is false. To the contrary, captivity, in general, harms killer whales.

* * *

Signed on February 9, 2019, in Rainbow Beach, Queensland, Australia



Dr. Pedro Javier Gallego

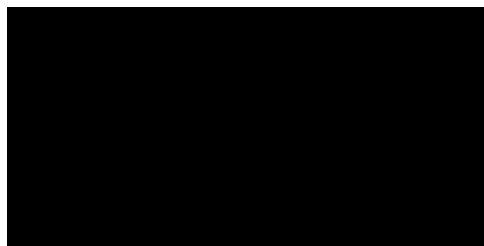
445

[REDACTED]

OPENING EXPERT REPORT OF DR. PEDRO JAVIER GALLEG0

Exhibit A

Pedro Javier Gallego Reyes
37, rue du Nord
L-4260 Esch-sur-Alzette
Grand Duchy of Luxembourg
Europe
+352 661197324
pierre.gallego@odyssea.lu



Curriculum Vitae

EDUCATION

- January 2014 - present: **PHD CANDIDATE IN BIOLOGY**, Oceanography Laboratory, University of Liege. Subject: Pollutants and stable isotopes in humpback whales from Ecuador and Mozambique.
- September 2003 - November 2004: **MASTERS IN MARINE MAMMAL SCIENCE**, University of Wales, Bangor (UK) with "distinction".
- Academic year 2001-2002: **D.E.A. (DIPLÔME D'ETUDES APPROFONDIES) DEGREE IN VETERINARY SCIENCE** (dissertation presented on 30 September 2002: Investigation of dolphin blow cytology) at the Faculty of Veterinary Medicine (F.M.V.), University of Liege (Belgium), in collaboration with Duisburg Zoo (Germany), with "la plus grande distinction" ;
- 2000: **D.V.M. (DOCTOR IN VETERINARY MEDICINE)** degree obtained at the F.M.V., University of Liege, with "grande distinction" ;
- 1997: **"CANDIDAT EN SCIENCES VÉTÉRINAIRES"** degree obtained at the F.M.V., University of Liege, with "grande distinction" ;

PROFESSIONAL EXPERIENCE

- From 2005 to present: Scientific Head of Delegation and Alternate Commissioner at the International Whaling Commission annual meetings for the Government of Luxembourg.
- Since 2007: Scientific Advisor and Alternate Commissioner for the Government of Luxembourg at international conventions like CITES, CMS, the Bern Convention, AEWA and CCAMLR (2018).
- Since 2006: occasional consultancies for INGOs like WCS, PETA, One Voice ...

LANGUAGE SKILLS

- Mother tongues: **French, Spanish**.
- Excellent speaking, reading and writing skills in **English, German, Portuguese** and **Luxembourgish**.
- Good understanding of oral and written **Italian** and **Dutch**.

PUBLICATIONS

Peer-reviewed publications:

- Van Waerebeek, K., Sequeira, M., Williamson, C., Sanino, G.P., **Gallego, P.**, Carmo, P. (2006) Live-captures of common bottlenose dolphins *Tursiops truncatus* and unassessed bycatch in Cuban waters: evidence of sustainability found wanting. LAJAM 5(1): 39-48.
- Meurens F., Schyns F., Keil G.M., Muyikens B., Vanderplasschen A., **Gallego P.**, Thiry E. (2004) Superinfection prevents recombination of the alphaherpesvirus bovine herpesvirus 1. Journal of Virology, Vol. 78, No. 8, 3872-3879.
- Meurens, F., **Gallego, P.**, Bourgot, I., Thiry, E. L'herpesvirus B du singe, un agent d'anthropozoonose méconnu. Ann. Méd. Vet., 2002, 146 (1), 1-8.

Other publications:

- Andréu, E., Medina, M., García, A., Martínez, M., **Gallego, P.**, & Cervera, J. L., 2009. Breves periodos de ausencia del calderón común (*Globicephala melas*) en el Estrecho de Gibraltar; Galemys 21 (special nº): 181-194, ISSN: 1137-8700.
- Butterworth, A., **Gallego, P.**, Gregory, N., Harris, S. and Soulsbury, C., 2007. Welfare aspects of the Canadian seal hunt: Final report, 45 pp. Document submitted to EFSA (European Food Safety Authority).

Conference communications:

- **Gallego, P.**, Castro, C.; Killer whale (*Orcinus orca*) predation in the waters of Machalilla National Park, Ecuador; Poster presented at the 22nd Benelux Congress of Zoology, October 2015, Amsterdam, The Netherlands.
- **Gallego, P.**, Das, K., Castro, C.; Assessing humpback whale (*Megaptera novaeangliae*) reactions to biopsy darting in the Machalilla National Park, Ecuador. Poster presented at the 29th Conference of the European Cetacean Society (ECS), April 2015, Malta.
- **Gallego, P.**, Beddall, K., Bettancourt, L., Frediani, J.; Humpback whale (*Megaptera novaeangliae*) entanglement evidence from the Dominican Republic. Poster presented at the 27th Conference of the European Cetacean Society (ECS), April 2013, Setubal, Portugal.
- Acosta, M., **Gallego, P.** ; Longterm interspecific association and calf kidnapping between a bottlenose dolphin and common dolphins. Poster presented at the 24th Conference of the European Cetacean Society (ECS), March 2010, Germany.
- **Gallego, P.** Possible physiological and pathological impacts of climate change on cetaceans. Talk presented at the Workshop on climate change and cetaceans in Costa Rica, February 2009, San José, Costa Rica.
- **Gallego, P.**, Acero Giménez, A., Cosentino, A., Pérez Martín, E., Medina, B., Andreu, E. Killer whale hunting behavior and acoustics in the Strait of Gibraltar. Poster presented at the 23rd Conference of the European Cetacean Society (ECS), March 2009, Istanbul, Turkey.
- Acero, A., Tello, M.J., **Gallego, P.**, Andreu, E., Medina, B. Cetacean interactions with fisheries in the Strait of Gibraltar. Poster presented at the 23rd Conference of the European Cetacean Society (ECS), March 2009, Istanbul, Turkey.
- Tello, M.J., Andréu, E., Medina, B., **Gallego, P.**, Acero, A. Dramatic decrease of short-beaked common dolphin (*Delphinus delphis*) sightings in the Strait of Gibraltar. Poster presented at the 23rd Conference of the European Cetacean Society (ECS), March 2009, Istanbul, Turkey.
- Pérez Martín, E., Cosentino, A., **Gallego, P.**, Andreu, E., Acero Giménez, A., Medina, B. Skin lesions observed in cetaceans in the Strait of Gibraltar. Poster presented at the 23rd Conference of the European Cetacean Society (ECS), March 2009, Istanbul, Turkey.
- Cosentino, A., Zimmermann, C., **Gallego, P.**, Pérez Martín, E., Andreu, E., Medina, B. First recaptures of fin whales (*Balaenoptera physalus*) migrating through the Strait of Gibraltar. Poster presented at the 23rd Conference of the European Cetacean Society (ECS), March 2009, Istanbul, Turkey.
- García, A., Andréu, E., **Gallego, P.**, Lapuente, L., Martínez, M. & Medina, B. Collisions in the Strait of Gibraltar. Poster presented at the 22nd Conference of the European Cetacean Society (ECS), March 2008, Egmond aan Zee, the Netherlands.
- Andréu, E., **Gallego, P.**, Medina, B., Lapuente, L., Pardo, D. & Cervera, J. L. High levels of interspecific interactions in the Strait of Gibraltar. Poster presented at the 22nd Conference of the European Cetacean Society (ECS), March 2008, Egmond aan Zee, the Netherlands.
- Medina, B., Andréu, E., **Gallego, P.**, Tello, M.J., Martínez, M. & Lapuente, L. Bottlenose dolphin response to whale-watching vessels in the Strait of Gibraltar. Poster presented at the 22nd Conference of the European Cetacean Society (ECS), March 2008, Egmond aan Zee, the Netherlands.
- Martínez, M., Andréu, E. & **Gallego, P.** Sperm whales and climate change: unusual distribution in the Strait of Gibraltar. Poster presented at the 22nd Conference of the European Cetacean Society (ECS), March 2008, Egmond aan Zee, the Netherlands.

- Andréu, E., **Gallego, P.**, Rodríguez, N., Cervera, J. L. Long-finned pilot whale response to whale-watching vessels in the Strait of Gibraltar. Poster presented at the 17th biennial Conference of the Society for Marine Mammalogy (SMM), December 2007, Cape Town, South Africa.
- **Gallego, P.**, De los Rios y Loshuertos, A., Cosentino, A. (2007) Killer whales (*Orcinus orca*) from the Strait of Gibraltar on the brink of extinction. Poster presented at the 17th biennial Conference of the Society for Marine Mammalogy (SMM), December 2007, Cape Town, South Africa.
- **Gallego, P.**, Andréu, E., Cosentino, A., Lott, R. & Scullion, A. Killer whale (*Orcinus orca*) diet in the Strait of Gibraltar. Poster presented at the 21st Conference of the European Cetacean Society (ECS), April 2007, San Sebastian, Spain.
- Andréu, E., **Gallego, P.**, Rodríguez, N., Medina, B. & Cervera, L. Short seasonal absence of long-finned pilot whales in the Strait of Gibraltar. Poster presented at the 21st ECS Conference, April 2007, San Sebastian, Spain.
- Andreu, E., Medina, B., **Gallego, P.**, Cervera L. Interspecific mating between bottlenose dolphin and long finned pilot whale. Poster presented at the 20th ECS Conference, April 2006, Gdynia, Poland.
- **Gallego, P.**, Lott, R. Long finned pilot whales chase killer whales in the Strait of Gibraltar. Poster presented at the 16th biennial Conference of the SMM, December 2005, San Diego, USA.
- van der Schaar, M., **Gallego, P.**, André, M. A standard method for sperm whale coda classification. Poster presented at the 19th ECS Conference, March 2005, La Rochelle, France.
- Culloch, R.M., Davies-Marshall, P., **Gallego, P.**, Krzyszczyk, E., Lamb, J., Lott, R., McCully, S., McGee, J., Nelson, M., Nuuttila, H.K., Scullion, A.J., Tetley, M.J., Vanman, C., Weller, M., Reid, R.J., Goold, J.C.. Sound velocity in spermaceti oil from different locations in the head of a sperm whale (*Physeter macrocephalus*). Poster presented at the 18th ECS Conference, April 2004, Kolmarden, Sweden.
- **Gallego, P.**, García Hartmann, M., Coignoul, F. Methodology of dolphin blow cytology examination. Poster presented at the 30th Annual Symposium of the European Association of Aquatic Mammals (EAAM), March 2002, Aalborg, Denmark.
- **Gallego, P.**, García Hartmann, M. Food management in bottlenose dolphin (*Tursiops truncatus*), oral presentation at the 29th Annual Symposium of the EAAM, March 2001, Genoa, Italy.
- García Hartmann, M., **Gallego, P.** Bacterial isolates from fish used for marine mammal feeding. Poster presented at the 29th Annual Symposium of the EAAM, March 2001, Genoa, Italy.

MISCELLANEOUS

- Member of the ECS, SMM, the Benelux Zoological Society, and the Grand Ducal Institute.
- Research associate of the Luxembourg National Natural History Museum.
- Carried out necropsies of cetaceans at the National Museum of Natural History of Leiden and the Dutch National Fisheries Institute (RIVO).
- Semi-professional photographer: many photographs have been published in scientific and guide books on marine mammals.
- B driving license, scuba diving certification (PADI Divemaster), International Powerboat Certificate (Level 2 Course, Royal Yachting Association, UK).