MY JOURNEY TO CAMEL SCIENCE TO BECOME A CAMEL ANATOMIST

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My "Journey to Camel Science" dates back to the year 1973, the year of finishing my veterinary medicine study in Faculty of Veterinary Medicine, Assiut University, Egypt.

I loved camels and may the cause is my inspiration from a text from the Holly Quran, Surat Al-Ghāshiyah / 17 which says: "Then do they not look at the camels - how they are created?". So it must be something peculiar in these animals.. the camels!

My Master thesis in anatomy was on the "Blood vascularisation of the kidney of the dromedary. Anatomical and histological study" which I finished in Assiut in 1976.

The Ph.D. thesis in anatomy was on the "Vascularisation of the pelvic limb of the camel with special reference to the foot pad" which I finished in Assiut in 1979. The glomerulus-like structures in the camel's foot pad were described in this study for the first time.

My first visit abroad, Germany, was to the Institut für Anatomie in Justus-Liebig Universität, Giessen was in 1981. I spent there two years and returned back home with 9 publications and very good relations. The first publication was on the cartilages of the camel larynx (published in Zentralblatt Vet. Med. C, 1983, 12: 77 84). I took the samples of the work with me from Egypt, as I used after that in my yearly visits to Germany. I returned to Egypt after getting a Diploma in "High Education and International Development" from Kassel University (in 1983). I came back also with my future German wife Dr. Brigitte Schenk, who I met in the same Institut in Giessen. She came back to Egypt after finishing her Ph.D. in Histology. She is my companion in my journey to camel science including all the congresses and the visits to every place where camels exist.

Another stop in my career, while working on a research on the radiology of the camel skull (published in Vet. Radiology, 1990, 31: 161 164). I decided to broad my knowledge in Radiology, and registered for a second Master Degree in Veterinary Surgery on the teeth of the goats and got the degree in 1992 from Assiut University. Then after, I registered for the second Ph.D. in surgery and passed the first year in 1994 and completed the thesis after that.

In the year 1989 I was promoted and got the title of Professor of Veterinary Anatomy and Embryology. Then after, I moved from Assiut University in 1998, to the University of Sadat City (former a branch from Menoufiya University) and founded there the Department of Anatomy and Histology.

I was asked from my pen-friend (until this time) Prof. T.K. Gahlot to write a chapter on Camel movements in a multi-author book he intend to publish. I wrote this chapter and the book "Selected Topics on Camelids" was Published by The Camelid Publishers, Bikaner, India, 2000. Another contribution and co-operation with Prof. Gahlot resulted in a second book (Published by Camel Publishing House, Bikaner, India, 2011), under the title: "Selected Research on Gross Anatomy and Histology of Camels". Then I became a member of the scientific board of the Journal of Camel Practice and Research. (JCPR), edited with success by Prof. Gahlot until present.

In 2008, I published the first issue of my "Journal of Veterinary Anatomy" which was a biannual and camels had a fair share in the publication.

The other most important point in my career was the three years teaching anatomy and histology in James Cook University in Australia (2012-2015) and dissecting the animals found only in Australia. Moreover, I learnt more about the feral camel population in Australia. This chance encouraged me to add a chapter on the history of introducing camels into Australia for the first time by the Afghans or Ghans as they were called (the book "The camel journey from North America to Africa

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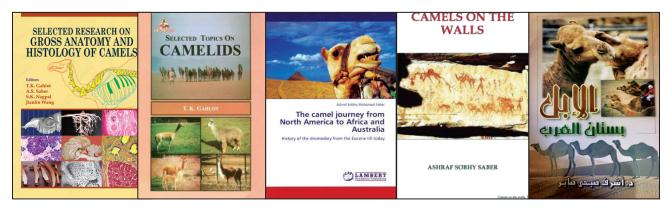










Fig 1. Camel museum, Faculty of Veterinary Medicine, University of Sadat City, Egypt. (Founded and collected by A.S. Saber, opened in 2022)



Fig 2. Arabic Calligraphy (one of my hobbies) drawing camels in a sitting and standing position. (By A.S. Saber, 2020).

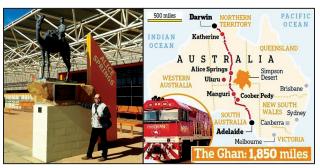


Fig 3. Alice Springs rail station in the middle of Australia where the train "the Ghan" travels southwards and northwards. The Ghan memorises the cameleers, the Afghans.





Fig 4. Dissecting the blood vessels of the hind limb of a camel (My Ph.D. thesis, 1978), left & Papillary body of the camel reticulum as seen by scanning E/M, (published in Journal of Camel Practice and Research, 1998, Vol. 5(1):51-55.), right.





Fig 5. Camel Farm in Kazaghstan (left) & Tawareq on camels, Morrocco (right).



Fig 6. Port Augusta's mayor, Mr. Noel Webb, posed on a camel with newly arrived Afghan cameleers, 1897. Photo Credit: South Australia Museum.

and Australia" which was published by Lambert Academic Publishing, Germany, 2013).

In Australia, also, I wrote a paper on the history of the Australian camels and the problem of its eradication and killing. I shared with it in the 4th Conference of ISOCARD, June 8-12,2015, held in Almaty, Kazakhstan and was awarded the Best Poster Award.

Another stop in my career was achieving my dream to found and finish a museum to display all the materials I collected from all over the world, for anatomy, camels, wild life, history of veterinary medicine and others (plants, fossils, stones ..etc). With the support of the President of the University, Prof. Ahmed Bayoumi, and the help of my wife Dr. Brigitte. The Camel Museum, the first and only one in Egypt was opened officially by the President of the University and the Minister of High Education in 2022.

I got 5 successive times a German Scholarship (DAAD) with three-years between each to carry out research with the German colleagues, mostly on camels (placenta, stomach, footpad) resulted





Fig 7. Anatomy museum, Faculty of Veterinary Medicine, University of Sadat City, Egypt. (Founded and collected by A.S. Saber, opened in 2022).

in many publications and shared in international congresses.

I published more than 130 papers in anatomy, histology and history of veterinary medicine out of which about 50 were on the camels. I published 42 books in Arabic and in English, from them 5 on camels.

Nowadays, I am focusing on finish my book on the history of the camels depicted on the walls of the caves all over the continents. You can say another lane of interest in camels beside anatomy.

I had a chance to see camels in their normal habitat in the deserts or in the farms where milk is industrialised in many countries such as in Egypt, Ethiopia, Morrocco, Saudi Arabia, Jourdan, India, Kazakhstan and Australia.

I received Menoufyia University prize for the distinguish research (paper on the anatomy of the camel's nail), December 2000, Distinguished Camel Scientist Award, from College of Veterinary and Animal Science, Rajasthan Agriculture University, Bikaner, India, during the International Camel Conference, 16-17 Feb. 2007. I received also the Best Poster Award (Feral camels in Australia: past, present,

future) in the 4th Conference of ISOCARD. *June* 8-12, 2015 Almaty, Kazakhstan, and the Award of Appreciation of University of Sadat City for the entire scientific, social and artistic career, 2018, and the Albert Nelson Marquis Lifetime Achievement Award, USA, 2020.

Published Books on camels

- The Camel Journey from North America to Africa and Australia, Lambert Academic Publishing, Germany, 2013.
- Selected Research on Gross Anatomy and Histology of Camels (co-editor) Published by Camel Publishing House, Bikaner, India, 2011
- Selected Topics on Camelids (co-author) Published by The Camelid Publishers, Bikaner, India, 2000.
- Camels, the Paradise of Arabs (Published by Asela for design and Publishing, Egypt, 2001), In Arabic "191 pages".
- "Camels on the wall" under preparation (290 pages)

Publications on camels in International Journals

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- Saber AS and Erasha AM. A Morphological and scanning electron microscopical studies of the nail of the camel (*Camelus dromedarius*). Journal of Camel Practice and Research. 2006; 13(2):111-116.
- Saber AS and FM Makady. Anatomical and clinical studies on the lacrimal system in the camel (*Camelus dromedarius*). Assiut Veterinary Medical Journal. 1987; 19(37):17-22.
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- Saber AS (2018): Rock Art Proves the Presence and the Use of Camels in North Africa. The 5th International Congress of ISOCARD, Laâyoune, Morocco, 12-15 November, 2018
- Saber AS (2019): Camel Rock in North Africa. 18th Scientific Congress of Assiut University, Assiut, Egypt, 5-7 November 2019.
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- the Egyptian Society of Camel Sciences, Sadat City. 13/12/2022
- Saber AS (2024): Rock Art Proves the Presence and the Use of Camels in Asia. 1st International Congress of Nature-Based Ecological Restoration (Emphasising of Bactrian Camels), 27-18 August, 2024, University of Mohaghegh Ardabili, Iran.
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