

CURRICULUM VITAE OF PROF. R.N. SHARMA
Pathobiology Academic Program
School of Veterinary Medicine
St. George's University, Grenada, West Indies

A. GENERAL PARTICULARS:

NAME : Ravindra Nath Sharma
Sex : Male
Nationality : Indian

Present Address : Prof. R.N. Sharma
Professor
Associate Dean, Graduate Program
Associate Director, Research
School of Veterinary Medicine
Associate Director of research
St. George's University
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B. ACADEMIC & PROFESSIONAL QUALIFICATIONS

<u>Degree</u>	<u>Year</u>	<u>University</u>
B.V.Sc. & A.H.	1961	Agra University, India
M.V.Sc.	1965	Agra University, India Major Subject: Veterinary Pathology
Ph.D.	1974	Agra University, India Major Subject: Veterinary Pathology

C. PROFESSIONAL EXPERIENCE

Engaged in Teaching, Disease Diagnosis, and Research from May 1965 Till Date in the following capacities:

1. ***Professor of Veterinary Pathology***
School of Veterinary Medicine, St. George's University, Grenada,
January 2000 till date.
Responsibilities:

Organization and teaching of DVM and MSc students in the subject of
Pathology and Avian diseases.
2. ***Director of Pathobiology Academic Program SVM (July 2000 to August 2011)***

Responsibilities:

Development and organization of the Pathobiology Academic Program
3. ***Associate Dean Graduate Program and Associate Director, Research 92005 till date)***

Responsibilities
 1. Development and organization of graduate degree program in the School of Veterinary medicine.
 2. Development of research in St George's University
4. ***Professor of Veterinary Pathology*** School of Veterinary Medicine, University of Zambia, May 1994 to December 1999.

Responsibilities:

Organization, teaching and guidance of graduate and post graduate studies in the subject of Pathology and Avian Medicine.
5. ***Professor of Veterinary Pathology:*** Shahid Chamran University, Ahwaz, Iran. July 1989 to March 1994.

Responsibilities:
 - i) Development of courses, laboratory facilities in the subject of Pathology, Avian diseases and Clinics in the school which was devastated during the war.
 - ii) Teaching, guidance and Research to graduate and postgraduate students in the subject of Pathology and Avian Diseases.
3. ***Professor of Avian Medicine:*** Great Al Fateh University of Medical Sciences,

Tripoli, Libya. August 1986 to September, 1988.

Responsibilities:

- i) Development of courses in teaching avian diseases to graduate students.
- ii) Establishment of the department of Avian Medicine.
- iii) Establishment of diagnostic and Consultancy for poultry farmers.

4. *Senior Lecturer of Clinical Pathology:* School of Veterinary Medicine, University of Zambia, Lusaka. August 1985 to August 1986.

Responsibilities:

Teaching of graduate students in Clinical Pathology

5. *Pathologist In-Charge of Diagnostic Section Central Veterinary Research Institute, Lusaka, Zambia:* March, 1981 to July 1985.

Responsibilities:

Conducted and Co-ordinated Veterinary Diagnostic Services in Zambia. Imparted Consultancy Services to farming community of the country.

6. *Commonwealth Fund for Technical Cooperation Expert (Poultry Pathologist)* to the Government of the Republic of Zambia. October 1976 to December 1980.

Responsibilities:

- i) Diagnostic and Consultancy Services to poultry farmers
- ii) Planning and formulation of control measures for avian diseases
- iii) Establishment of diagnostic units in the country and training of local personnel
- iv) Teaching students for certificate course in Animal Pathology/diseases at Zambia Institute of Animal Health, Mazabuka, Zambia

7. *Pathologist (May 65 – September 76) Assistant Pathologist (April 72 – April 74) Assistant Professor Pathology (May 69 – March 72) Research Assistant (May 1965-April 1969):* Indian Veterinary Research Institute, Izatnagar, India. (*Deemed University*)

Responsibilities:

- i). Teaching animal and poultry diseases to Postgraduate Students,
- ii) Conducting research and diagnostic Work.

D. AWARDS/HONOURS/ACHIEVEMENTS/CONTRIBUTIONS

1. **AWARDEE OF THE NATIONAL “JAWAHAR LAL NEHRU AWARD” FOR THE YEAR 1975** for outstanding research contribution in the field of veterinary pathology in India.
2. **RECIPIENT OF PFIZER AWARD FOR RESEARCH EXCELLENCE FOR 2008;** for outstanding achievement and dedication in the Field of Veterinary Medicine at St George’s University.
3. **Recipient of “IAVP Award”** from the Indian Association of Veterinary pathologists at 31st Annual Conference of Indian Association of Veterinary pathologists, held at Anand, India from November 13-15, 2014. In 2016 I was honored by award of fellowship of IAVP.
4. ***Organized and Established Diagnostic and Consultancy Services*** to Poultry farmers in the Republic of Zambia as an Expert for Commonwealth Fund for Technical Co-operation (CFTC).
5. ***Diagnosed Marek’s Disease for the First Time in India (1971)*** and Development of the diagnostic reagents and procedures for Marek’s disease (1973-74). This Achievement was commended by the National Research Award.
6. ***Diagnosed Infectious Bursal Disease for the First Time in Zambia (1978)*** and studied epidemiology of Newcastle disease (1982 - 84). Based on the findings, vaccination policy for these two major diseases of poultry, was formulated in Zambia. This resulted in control of IBD and NCD in Zambia.
7. ***Isolated many Salmonella Serotypes from Livestock and Poultry*** - for the first time in the Rep. of Zambia and formulated control measures for salmonella in poultry. **Plan implemented by me on breeding flocks and hatcheries made Zambia free of fowl typhoid.**
8. **Seroprevalence of Toxoplasmosis, leptospirosis and Hanta virus (zoonotic agents) in chickens and rats in Grenada. This is the first report of identification of zoonotic pathogens in rats and chickens in Grenada.**

F. PUBLICATIONS

- (a) Book: (i) “Important Poultry Diseases: Their Diagnosis and Control” Published by Commonwealth Fund for

Technical Cooperation, Commonwealth Secretariat,
London, 1979.

- (b) Monograph: (i) “Menace of Marek’s Disease in India” Published by Indian Veterinary Research Institute, Izatnagar, India, 1974.
- (ii) “Poultry diseases and Management,” a Continuous Professional Development course. Published by Veterinary Privatization trust; the European Union and the Govt. of Zambia (1999)
- (c) Research Papers: 183 (List enclosed)

G. ADMINISTRATIVE EXPERIENCE

1. Director, Pathobiology Academic Program, School of Veterinary Medicine, St. George’s University, Grenada, since July 2000 to August 2011.
2. Associate Dean, Graduate Program, School of Veterinary Medicine, St George’s University, Grenada, Since 2004.
3. Associate Director Research, St George’s University, Grenada, Since 2005.
4. Assistant Dean (Postgraduate Studies) School of Veterinary Medicine, University of Zambia (January, 1995 November 1999)
5. Acting Dean, School of Veterinary Medicine, Zambia for more than one year (April 1997 to September 1997 and on many occasions for more than a month).
6. Acting Assistant Director (Research) Central Veterinary Research Institute, Lusaka on many occasions during 1980 – 84.
7. Research Co-ordinator, School of Veterinary Medicine, University of Zambia (1995 – 96).

H. CONTRIBUTION TO IN-SERVICE TRAINING

1. Developed an “in-service training program” in 1996 in the School of veterinary medicine, University of Zambia that offered 4 training courses to

poultry farmers and training personnel's engaged in the Department of Animal Production, Government of Zambia.

2. Developed a manual "Poultry diseases and management" for a training program for private veterinary practitioners, supported by the European Union and the Government of Zambia (1998).
3. Developed and implemented "out reach program" in 2004, at the St George's University Grenada, to disseminate the research results for the benefit of the Grenadian farmers and community as a whole. It is held annually.

I. CONTRIBUTION TO PROFESSIONAL ASSOCIATIONS

1. Associate member of American Association of Avian Pathologists since 1994.
2. Founder of "Alumni Association" of Indian Veterinary Research Institute. I was responsible to run the activities of the Alumni Association from 1967 to 1976, the year I left for abroad.
3. Founding member of the "Indian Association of Veterinary pathologists (1972) and the "Indian Journal of Veterinary Pathologists." (1975).
4. Member of Editorial Board of "Zambia Journal of Veterinary Science and Technology," University of Zambia (1997-1998)
5. Life member of the Indian Association for the advancement of Veterinary Research.
6. Member on editorial board, Journal of animal research (INDIA)
7. Member on editorial board of West Indies veterinary medicine journal (TRINIDAD)
8. Member on editorial board of Indian Journal Veterinary Pathology (INDIA)
9. Member of editorial board of Veterinary Medicine Open Journal (USA)
10. Member of the editorial board of Int Journal of tropical disease and health (India, USA, UK)

J. LEADERSHIP AND CONTRIBUTIONS TO UNIVERSITY AND PUBLIC SERVICE

1. One of three members Committee for planning and establishment of School of Veterinary Medicine, University of Zambia (1981-83).

2. As Assistant Dean (Graduate Studies) planning and co-ordination of postgraduate studies, research projects and staff development in the School of Veterinary Medicine, University of Zambia (1995-1999).
3. Chairman, Senate sub-committee on semester system for co-ordination of the semester courses in the School of Medicine, Agriculture and Veterinary Medicine, University of Zambia (1996-1999).
4. Member of senate, University of Zambia (1996-1999)
5. Taught general and systemic pathology to MD students at the School of Medicine (1995 – 96).

LIST OF PUBLICATIONS

PROF. R.N. SHARMA

1. Sharma, R.N., N.P. Bhalla, J.M. Lall. Tissue response in fowls to P. septica (Avian) oil adjuvant vaccine. Indian J. Vet. Sci. 38, 688-707, 1968.
2. Sharma, R.N., N.P. Bhalla, Studies on haematological response to inoculation of virulent culture of P. septica (Avian) Indian Vet. J. 46. 195-2102, 1969.
3. Sharma, R.N., Brahm Datt. Histopathology of white spots and scars in caprine kidneys. Indian J. Anim. Sci. 40 518-521, 1970.
4. Mohanty, G.C., B.S. Rajya, R.N. Sharma. Pathology of Marek's disease I. Isolation of MD agent in India and their behaviour. Indian J. Pout. Sci. 6. 46, 1971.
5. Mohanty, G.C., B.S. Rajya, O.P. Paliwal and R.N. Sharma. Pathology of Marek's disease II. Use of diagnostic tests to evaluate the presence of MD and its infection. Indian J. Pout. Sci. 6. (4) 47. 1971.
6. Sharma, R.N., G.C. Mohanty, B.S. Rajya. Skin manifestations of Marek's Disease. Current Sci. 41. 708-710, 1972.
7. Sharma, R.N., G.C. Mohanty, Skeletal muscle lesions in Marek's Disease. Indian J. Pout. Sci. 7(2), 5-7, 1972.
8. Sharma, R.N., B.K. Gupta, B.S. Kulshrestha, S. Kumar, B.S. Rajya. Investigations into an outbreak of blindness in chicks. Indian J. Anim. Health. 11 (2) 193-198, 1972.
9. Mohanty, G.C., R.N. Sharma, B.S. Rajya. Use of MD Vaccine: its prospects and restrospects. Indian Poultry Review 4 (2), 744, 1973.

10. Sharma, R.N., N.P. Bhalla, J.M. Lall. Observation on experimental infection of *P. septica* (Avian) in the domestic fowl. *Indian J. Anim. Health.* 13 (2), 105-109, 1974.
11. Rajya, B.S., Mohanty, G.C., Sharma R.N., Mechanism of transmission of infection cycle in flocks and development of carrier state problems. *Indian Poultry Review* 4 (2), 750, 1973.
12. Chawla, R.S., R.N. Sharma, N.P. Bhalla. Adenocarcinoma of the gall bladder in a cow a case report. *Indian Vet. J.* 52, 532-36, 1975.
13. Sharma, R.N., O.P. Paliwal, B.S. Sharma, G.C. Mohanty, B.S. Rajya. Pathology of Marek's Disease (MD). IV effects of MD isolates on growth of chicken. *Indian J. Poultr. Sci.* XI, (2), 97-101.
14. Sharma, S.N., A.S. Narula, N.P. Bhalla, R.N. Sharma. Studies on the aorta of goats. *Food Farming and Agric. July*, 1976. pp. 15-16.
15. Sharma, R.N., G.C. Mohanty, S. Gopalkrishna, B.S., Rajya. Immunoflourescent study on the cutaneous lesions of Marek's Disease in chickens. *Indian J. Vet. Path.* 1, 41-48, 1976.
16. Sharma, R.N., G.S. Pandey, P.K.R. Iyer. Changes in serum protein levels in ovine and caprine fascioliasis. *Indian J. Vet. Path.* 1, 49-52, 1976.
17. Pandey, G.S., R.N. Sharma, P.K.R.Iyer. Serum protein changes in ovine and caprine hepatic schistosomiasis due to *schistosoma indicum*. *Indian J. Vet. Path.* 1, 60-63, 1976.
18. Mohanty, G.C., R.N. Sharma, S. Gopalkrishna, H.K. Pradhan, B.S. Rajya. Lesions of MD in some modified cutaneous appedages of chicken. *Poultry science* 55, 40-44, 1976.
19. Sharma, R.N., G.C. Mohanty, Vimal Mehra, B.S. Rajya. Scrum proteins in Marek's Disease Virus inoculated chickens. *Indian J. Anim. Sci.* 46 (6): 310-12 1976.
20. Sharma, R.N., G.C. Mohanty, S. Gopalkrishna, B.S. Rajya. Pathology of spontaneous cases of Marek's disease (MD). *Indian J. Anim. Sci.* 46 (18), 442-446, 1976.
21. Sharma, R.N., S. Gopalkrishna, G.C. Mohanty, B.S. Rajya. Response of chicken embryo to Marek's Disease Virus. *Indian J. Anim. Sci.* 46, (6) 303-309, 1976.
22. Sharma, R.N., G.C. Mohanty, S. Gopalkrishna. Epidemiology of Marek's Disease (MD). Prevalence of MD infection in field flocks. *Indian J. Anim. Sci.* 47, (8), 486-494, 1977.
23. Sharma, R.N., G.C. Mohanty, S. Gopalkrishna, B.S. Rajya. Effect of Marek's Virus on the bursa of Fabricius. *Indian J. Anim. Sci.* 47, 410-413, 1977.

24. Sharma, R.N., G.C. Mohanty, S. Gopalkrishna, B.S. Rajya. Studies on Marek's Disease: Propagation and cytopathic changes by local strains of Marek's Disease Virus in chicken kidney cell-culture. *Indian J. Anim. Sci.* 45 (12), 962-962, 1975.
25. Sharma, R.N., G.C. Mohanty, S. Gopalkrishna, B.S. Rajya. Clinicopathology and Pathogenesis of Marek's Disease in experiemntal infection. *Indian J. Anim. Sci.* 47, 1977.
26. Sharma, R.N., I. Benko, S.D., Cruz. Preliminary observation on infectious bursal disease in Zambia. *Vet. Record.* 101. 153, 1977.
27. Sharma, R.N., M.N. Shandomo, Infectious bursal disease. *Farming in Zambia.* 11 (2), 5-6, 1977.
28. Sharma, R.N., Gopalkrishna, S., G.C. Mohanty, B.S. Rajya. Studies on certain blood serum and nervous tissue enzymes in experimental infection of Marek's disease. *Indian J. Anim. Sci.* 48 (1), 47-51, 1978.
29. Sharma, R.N., M.A.Q. Awan. Prevalence of Marek's Disease in Zambia. *Productive Farming.* August. 1978 pp. 18-19.
30. Sharma, R.N. and Chiba Y. An outbreak of rabies in indigenous cattle in the Southern Province of the Republic of Zambia. *Bull. Anim. Hlth. Produ. Afr.*, 31, 115-117, 1986.
31. Hussein, N.A., Sharma R.N., Ando R., Chizyuka H.G.B. Study on Newcastle disease virus pathotypes in Zambia. *Rev. Sci. Tech. Off. Int. Epiz.* 3 (2), 383-389, 1984.
32. Hussein, N.A., Sharma R.N., Ando R., Chizyuka H.G.B. Futher review of the epidemiology of rabies in Zambia (1975-82). *Rev. Sci. Tech. Off. Int. Epiz.* 3 (1) 125-135, 1984.
33. Pandey, G.S., Sharma R.N., Chizyuka H.G.B. Study of bovine neoplasms in Zambia. *Bull. Anim. Hlth. Prod. Afr.* 32 (3), 289-291, 1984.
34. Pandey, G.S., Sharma R.N., Chizyuka H.G.B. Study of neoplasms of dogs in Zambia. *Bull. Anim. Hlth. Prod. Afr.* 31, 71-73, 1983.
35. Hussein N.A., Sharma R.N., Chizyuka H.G.B. Bovine rabies in Zambia. *Bull. Anim. Hlth. Prod. Afr.* 31, 105-114, 1983.
36. Sharma, R.N., Francis B.K.T., Pandey G.S., Chizyuka H.G.B. Goat Tuberculosis in Zambia. *Indian Journal Vet. Path.* 9, 2, 29-32, 1985.
37. Pandey, G.S., Sharma, R.N. A Survey of bovine pulmonary disease at Lusaka abattoir in Zambia. *Bull. Anim. Hlth. Prod. Afr.* 35, 336-338. 1987.

38. Sharma, R.N., Hussein N.A., Pandey G.S., Shandomo M.N. A study on Newcastle disease outbreaks in Zambia, 1975-1984. *Rev. Sci. Tech. Off. Int. Epiz.* Vol 5, (No. 1.), 5-14, 1986.
39. Hamid, M.A., Sharma R.N. Epidemiology of fowl typhoid in layer chickens in and around Tripoli (Libya). *Bull. Anim. Hlth. Prod. Afr.* 38, 315-317, 1990.
40. Pandey, G.S., Sharma, R.N., Chhabra, R.C. Chizyuka, H.G.B. Nodular necrosis (Roeckl's granuloma) in the muscles of cattle in the Republic of Zambia. Case reports. *Indian J. Vet. Path.* 9, 47-50, 1985.
41. Sharma, R.N., Pandey G.S. Spontaneous Tumors in duck in the Republic of Zambia: *Indian Vet. J.* 69, 76-77, 1992.
42. Sharma, R.N. Ovarian tumour and teratoma in poultry: *Indian J. Vet. Path.* 14, 79-61, 1990.
43. Sharma, R.N., Pandey G.S., B.K.T. Francis, A.Q. Khan. Salmonella infection in poultry in Zambia. *Bull. Anim. Hlth. Prod. Afr.* 39, 173-175, 1991.
44. Sharma, R.N., Pandey, G.S. An Outbreak of gizzard erosion and ulceration in chicks in Zambia. *Revue. Elev. Med. Vet. pays. Trop.* 43, 301-304, 1990.
45. Mayahi, M. and Sharma, R.N. Acute Marek's Disease in local nondescript chickens in Iran. *Indian J. Vet. Path.* 15 (I), 45-46, 1991.
46. Sharma, R.N. and Y. Mazahery. Eosinophilic Myositis in goat, a case record. *Vet. Rec.* 14 April, 1992.
47. Sharma, R.N. and Y. Mazahery. Myxoma of lung in a sheep. *Indian Vet. J.* 69, 942, 1992.
48. Saiyari, M., Ghorbanpour, M. and Sharma R.N. Horn Cancer in Sheep; a case report. *Indian Vet. J.* 71, 1233-34, 1994.
49. Saiyari, M., Khatermohammadi, M. and Sharma, R.N. Lung and liver lesions caused by *C. tenuicollis* in sheep in Iran. *J. Vet. Parasitology* 7 (1), 1993.
50. Saiyari, M., Hoshidar, M. and Sharma, R.N. Ultimo - bronchial cysts in sheep and goats. *Indian J. Anim. Sci.* 64 (7) 742-744, 1994.
51. Saiyari, M., Dehghani, M. and Sharma R.N. A note on pathological conditions of ovaries of adult Iranian buffaloes. *Buff. J.* 2, 171-176, 1994.
52. Saiyari, M., Mohd. F. Farahangnia and R.N. Sharma. Pathology of uterus in cows slaughtered in Ahwaz abattoir (Iran). *Int. J. Anim. Sci.* 9, 269-272, 1994.
53. Pandey G.S. and Sharma R.N. Antimicrobial susceptibility pattern of Salmonella isolates from cattle and chicken in Zambia. *Indian Vet. Med. J.* 18, 175-178, 1994.

54. Saiyari M., B. Mohammadian and Sharma R.N. *Linguatula serrata* (Frolich 1789) nymph in lung of goats in Iran. *tropical Animal Hlth and Prod.* 28, 312-314, 1996.
55. Saiyari, M., Hoshiar Mandavi, M. Mayahi and Sharma R.N. Spontaneous lesions in thyroid of sheep and goats in Iran. *Revue. elev. med. Vet. pays Trop.* 48 (3): 231-232, 1995.
56. Pandey G.S., Sharma R.N., and Musonda M.M. Study of neoplasmas of chicken in Zambia. *Bull. Anim. Hlth. Prod. Afr.* 44,121-122,1996.
57. Saiyari, M., B. Mohammadian, M. Khatermohammadi and Sharma R.N. parasitic lesions in lung of sheep and goats in Iran,. *Indian J. Ani. Sci.* 66 (4): 340-342, 1996.
58. Jamshidi, M.; Jamshadian, M. and Sharma R.N. Bacteriological studies on normal and pneumonic lungs of goats in Iran. *Indian J. Anim. Sci.* 65 (10), 1107: 1995.
59. Mayahi, M., R.N. Sharma and S. Maktabi. An outbreak of blindness in chicks associated with Salmonella pullorum infection. *Indian Vet. J.* 72, 922-925, 1995.
60. Saiyari, M., A. Reza Dilijani and R.N. Sharma. Pathology of kidney in goats in Iran. *Indian J. Anim. Sci.* 66 (3) 18-22 1976.
61. Mayahi, M. and Sharma R.N. Cholangiocarcinoma in chicken. A case report. *Indian Vet. J.* 73, 563-564, 1996.
62. Moghami, S.M., Saiyari, M., Mayahi, M., Sharma, R.N. , Pathology of uterus in buffaloes slaughtered in Ahwaz (Iran) abattoir. *Buffalo Journal* 12 (2), 213-218, 1996.
63. Sharma, R. N. , S. R. Bahadry and M. Saiyari. Adrenal cortical adenocarcinoma in a cow. *Indian Vet. J.* 73: 1175-76, 1996.
64. Sharma, R.N., Musonda, M..M., Munang'andu, H.M., Muyoyeta, P. and Sinyangwe, P.G. *Salmonella* isolation from animals in the Republic of Zambia. *Bull. Anim. Hlth. Prod. Afr.* 44,5-7, 1996.
65. Sharma, R.N., Munang'andu, H.M. and Muyoyeta P., Further review of the epidemiology of Salmonella gallinarum in Zambia 1986-94. Paper. Proceedings XX would Poultry Congress, New Delhi India. 2-8th Sept. 1996, Vol. II pp381-383, 1996.
66. Kabilika, S.H., Musonda, M.M., Van Der Walt, M.L. and Sharma, R.N. Occurrence of Salmonella enteritidis phage type 4 in chicken embryorated eggs in Zambia. Paper: Joint Regional Commonwealth Veterinary

Association/Mauritius Veterinary Association, Mauritius 31 July - 2nd Aug. 1996. pp 14.

67. Kabilika, S.H., Nagabayashi, T. and Sharma R.N. Bacterial pathogens from dead-in-shell chicken embryos from hatcheries in Zambia. Abstract. In XX World's Poultry Congress, New Delhi, India, 2nd - 8th Sept. 1996. Vol. IV pp. 305. 1996
68. Tuchili, L.M., Kodama, H., Takatori, I. and Sharma R.N. Detection of Salmonella from poultry using polymerase chain reaction and bacterial culture- a comparative study. Abstract. In XX World's Poultry Congress N. Delhi, India, 2nd - 8th Sept. 1996. Vol. IV pp 387.
69. Tuchili, L.M. Kodama, H., Sharma, R.N., Takatori, I., Pandey, G.S., Kabilika, S.H., Mukamoto, M., Tsuji, S. and Baba, T. Detection of Salmonella DNA in chicken embryos and environmental samples by polymerase chain reaction. J. Vet. Med. Sci. 58 (9) 881-884; 1996.
70. Munang'andu, H. M., M.Z. Syachaba and R.N. Sharma. A study of Infectious Bursal Disease outbreaks in Lusaka Province of Zambia. *Zambian J. Vet. Sci.* 1,8-10; 1996.
71. M.M. Musonda, R.N. Sharma, G.S. Pandey, J.O. Omamegbe, A.M. Mwanza, E.M. Mpabalwani, J. Nomura and A. Shiga. Molluscum Contagiosum in three horses in Zambia. *Bull. Anim. Hlth. Prod. Afri.* 44, 263 – 264, 1996.
72. Kabilika H.S. and R.N. Sharma. *Escherichia Coli* serotypes from dead-in-shell chicken embryos from hatcheries in Zambia. *Bull. Anim. Hlth. Prod. Afri.* 45: 199-204 (1996).
73. Hang'ombe, B.M., R.N. Sharma, L.M. Tuchili and Skjerve, E. Isolation of bacteria from table eggs in Zambia. *Indian. J. Ani. Sci.* 69: 445-47,1999.
74. Hang'ombe, B.M., H.S. Kalilika, E. Skjerve, L.M. Tuchili and R.N. Sharma. Epidemiology of Salmonella in chickens in Zambia I. Occurrence of *Salmonella enteritidis* in hatcheries, table eggs and chicken in Zambia. Proceedings: International Symposium on Food-Borne Salmonella in poultry, July 25 -26, 1998, Baltimore, Maryland. pp. 24.
75. Kalilika, H.S. and R.N. Sharma. Investigation into factors causing hatchery losses in Zambia. *Zambian J. Vet. Sci.* 2; 18-24, 1998.
76. Kabilika, H. S., M. M. Musonda, and R. N. Sharma. Bacterial flora from dead-in-shell Chicken embryos in Zambia. *Indian J. Vet. Res.* 8 (2): 1-6 (1999).
77. Hang'ombe, B. M., R. N. Sharma, E. Skjerve and L. M. tuchili. Occurrence of *Salmonella enteritidis* in pooled table eggs and market ready chicken carcasses in Zambia. *Avian Dis.* 43: 597-99 (1999).

78. Hang`ombe, B. M., R. N. Sharma, E. Skjerve and L. M. Tuchili. Isolation of bacteria during processing of chicken carcasses for the market in Lusaka, Zambia. *Veterinarski Arhiv.* 69 (4): 191-97 (1999).
79. Kabilika, H. S., Martie L. VanDer Walt, M. M. Musonda, R. N. Sharma. Phage types of *Salmonella enteritidis* from dead-in- shell chicken embryos in Zambia. *Indian J. Vet. Res.* 11 (1): 36-42 (2002).
80. Hang`ombe, B. M., Skjerve, E., Tuchili, L. M., Sharma, R. N. Pathogenicity of *Salmonella enteritidis* isolates isolated from table eggs and chicken carcasses in Zambia. *Bull. Anim. Hlth. Prod. Afri.* 46: 259-61 (1998).
81. Munang`andu, H. M., Mulumba, M., Makala, L., Mweene, A. S., Sharma R.N. Seroprevalence of Newcastle disease and Infectious Bursal disease in village chickens in the Eastern Province of Zambia. *Zambian J Vet Sc.* 3: 15-17. (2001)
82. Hang`ombe, B. M., Sharma, R. N., Tuchili, L. M. *Salmonella mbadaka* serovar in Zambia. *Zambian J Vet Sc.* 3: 42-44. (2001)
83. Kabuusu, R. M., McCann, T. J., Sharma, R. N. Isolation of bacterial pathogens from table eggs in Grenada. *J. Caribbean Vet. Med. Assn.* 3 (1). 21-25; 2003.
84. Dubey, J. P., M. I. Bhaiyat, C. De Allie, C. N. L. Macpherson, R. N. Sharma, c. Sreekuma,, M. C. B. Vianna,, S.K. Shen, O. C. H. Kwoh, K. B. Miska,, D. E. Hill and T. Lehmann. Isolation, tissue distribution and molecular characterization of *Toxoplasma Gondii* from chickens in Grenada, West Indies. *J Parasitol* 91 (3), 2005; 557-560.
85. Sumita P. Asthana, Calun N. L. Macpherson, Stanley H. Weiss,, Richard Stephens, R. N. Sharma and J. P. Dubey. Seroprevalence of *Toxoplasma Gondii* in pregnant women and cats in Grenada, West Indies. *J Parasitol.* 92 (3), 2006, pp 644-645.
86. M. I. Bhaiyat, R. N. Sharma. A four footed broiler chicken with duplication of cloaca. *West Indies Veterinary Journal* 5, (1) 2005, pp 27-29.
87. J.P. Dubey, M. I. Bhaiyat, C.L. N. Macpherson. C. deAllie, A. Chikweto, O.C. H. Kwok and R. N. Sharma. Prevalence of *Toxoplasma Gondii* in rats (*Rattus norvegicus*) in Grenada, West Indies. *J. Parasitol.* 92 (5), 1107-1108; (2006):
88. R. N. Sharma, M. I. Bhaiyat, C. deAllie, S. Tawde and C. L. N. Macpherson. Serologic evidence of five poultry pathogens in free-ranging chickens in Grenada, West Indies. Poster presentation: In 143 AVMA Annual Convention, Hawaii, July 15-19, 2006.
89. R. Pinckney, Camille C., M. I. Bhaiyat, A. Chikweto, R. N. Sharma and C. Macpherson. Prevalence of gastrointestinal parasites in free range poultry in Grenada, West Indies. *West Indian veterinary Journal.* Vol 8 (I) 2008. 23-26.

- 90 .Saul Mofya, R. Sharma, D. Stone, . Hariharan, Allen Pensick, A. Buffa, J. sakari and D.Doherty. Seroepidemiology of feline leukemia and Feline immunodeficiency virus infections in feral and domestic cats in Grenada. West Indian Veterinary Journal Vol 8 (I), 2008; 18-22.
91. A.Chikweto, R. Sharma, V. Matthew, G. Straton, K. Thorns, L. Parke and D. Dummer. Seroprevalence of West Nile virus in donkeys in Grenada and Carriacou. West Indian Veterinary Journal Vol 8 (I) 2008, 32-33..
92. H. Hariharan, Simone Oliveira, Shilpa Sharma. Isolation of *Aerococcus viridans* from and outbreak of hepatitis in a broiler flock in Grenada, West Indies. West Indian Veterinary Journal 8(2) 72-76, 2008.
93. Lisa M. Keenan., Alfred Chikweto, Ravindra N. sharma., Diana M. Stone. Seroprevalence of Hanta virus in *Rattus Norvegicus* in Grenada, West Indies. West Indian Veterianry journal Vol 8 (2), 67-71, 2008.
94. J. Keenan, R. Sharma, R. Dicker, J. Rayner and D. Stone. Seroprevalence of *Leptospira* in *Rattus Norvegicus* in Grenada West Indies. West Indian Medical Journal, West Indian Medical Journal 58(2), 115-118, 2009.
95. Viathianathan Sivanandan, Lidia Dragon, Harry Hariharan, Alfred Chikweto, Vanessa Matthew, Ravindra N. Sharma. Isolation of *Curvularia* species fungus from skin of a dog in Grenada, West Indies. West Indian Veterinary Journal. 8(2), 81-83, 2008.
96. J. P. Dubey, D. Stone, O. C. H. Kwok and R. N. Sharma, *Toxoplasma gondii* and *Neospora caninum* antibodies in dogs from Grenada, West Indies. J. Parasitol. 94(3), 750-751, 2008.
97. A. Chikweto, M. I. Bhaiyat, C. N. L. Macpherson, C. DeAllie, R. D. Pinckney, C. Richards and R. N. Sharma. Existence of *Angistrongylus cantanensis* in rats (*Rattus Norvegicus*) in Grenada, West Indies. Veterinary Parasitology, 162, 160-162, 2009.
98. Emily Cappon, Jill Caldwell, Marquita V. Gittens-St. Hilaire, Omowale Amuleru-Marshall, Harold R. Russell, Ravindra N. Sharma, Diana M. Stone. Seroprevalence of *Leptospira* in dogs in Grenada, West Indies. West Indian Veterinary Journal. 8(2), 50-55, 2008.
99. A. Chikweto, M. I. Bhaiyat, R. Sharma, C. DeAllie, P.E. McNeil. Angiomatous lesions in the skin of dogs in Grenada, West Indies. Journal of Commonwealth Veterinary Association, 25(1), 29-31, 2009.
100. J. P. Dubey, M. R. Lappin, O. C. H. Kwok, S. Mofya, A. Chikweto, A. Baffa, D. Doherty, J. Shakari, C. N. L. Macpherson and R. N. Sharma. Seroprevalence of *Toxoplasma gondii* and concurrent *Bartonella spp*, feline immunodeficiency virus and feline leukemia virus infections in cats from Grenada, West Indies. J. Parasitol. 95(5)1129-1133, 2009.

101. C. Fernandez, A.Chikweto, S. Mofya, L. Lanum, P. Flynn, J. P. Burnett, D. Doherty and R. N. Sharma. A serological study of *Dirofilaria immitis* in feral cats in Grenada, West Indies. *J. Helminthology* 2010, 84 (4): 390-393.
102. Alexa C. Rosypal, Shanesha Tripp, Christopher Kinlaw, R. N. Sharma, D. Stone and J. P. Dubey. Seroprevalence of canine Leishmaniasis and American Trypanosomiasis in dogs from Grenada, West Indies.. *J. Parasitol.* 96(1), 228-229, 2010.
103. D. S. Arathy, D. N. Tripathy, G. P. Sabarinath, M. I. Bhaiyat, A. Chikweto, V. Matthew and R. N. Sharma. Preliminary Molecular Characterization of a fowl pox virus isolate in Grenada. *Avian Diseases.* 54, 1081-1085, 2010.
104. Kamashi Kumar, Desmond Baggot and Ravindra Sharma. Medicinal properties of Neem. *West Indian Veterinary Journal*, 2009, 9 (1), 37-52.
105. Keshaw P. Tiwari, Alfred Chikweto, Guillaume Belot, Guillaume Vanpee, Claude DeAllie, Graeme Stratton, Ravindra N. Sharma. Prevalence of Intestinal Parasites in Pigs in Grenada. *West Indian Veterinary Journal* 2009, 9 (1), 22-27.
106. C. Coomansingh, R. D. Pinckney, M.I. Bhaiyat, A. Chikweto, S. Bitner, A. baffa, R. Sharma. Prevalence of endoparasites iin wild rats in Grenada. *West Indian Veterinary Journal*, 2009, 9(1): 17-21.
107. D. S. Arathy, G. Vanpee, G. Belot, V. Matthew, C. DeAllie, R. Sharma. Antimicrobial drug resistance in *Escherichia coli* isolated from commercial chicken eggs in Grenada, West Indies. *West Indian Medical Journal.* 2011, 60 (1), 53-56.
108. Harry Hariharan, Vanessa Matthew, Jacqueline Fountain, Alicia Snell, Devin Doherty, Brittany King, Eran Shemer, Simon Oliveira, Ravindra N. Sharma. Aerobic bacteria from mucous membranes, ear canals and skin wounds of feral cats in Grenada and the antimicrobial drug susceptibility of major isolates. *Comparative immunology, Microbiology and Infectious Diseases.* **34** (2011) 129-134.
109. Arathy sabarinath, Gopalkrishnan P. Sabarinath, Keshaw Tiwari, Sachin Kumthekar, Derek Thomas and Ravindra N. Sharma. Seroprevalence of Infectious Bronchitis Virus in Birds of Grenada. *Int. J. Poult. Sci.* **10 (4)**: 2011; 266-268.
110. A. Chikweto, S. Kumthekar, K. Tiwari, B. Nyack, M.S. Deokar, G. Stratton. C. N. L. Macpherson, R. N. Sharma and J. P Dubey. Seroprevalence of *Toxoplasma gondii* in Pigs, Sheep, Goats and Cattle from Grenada and Carriacou, West Indies. *The Journal of Parasitology* **97 (5)**: 2011.
111. Ulrike Zieger, Heather Trelease, Nicolas Winkler, Vanessa Mathew, Ravindra N. Sharma. Bacterial contamination of Leatherback Turtle (*Dermochelys coriacea*) eggs and sand at Levera beach, Grenada, West Indies- a preliminary study. *West Indian Veterinary Journal* 2009, **9(2)**: 21-26 Printed in 2011)

112. Arathy Sabarinath, Keshaw P. Tiwari, Claude DeAllie, Guillaume Belot, Guillaume Vanpee, Vanessa Mathew, Ravindra Nath Sharma Harry Hariharan. Antimicrobial resistance and phylogenetic groups of commensal *Escherichia coli* isolates from healthy pigs in Grenada. WebMed Central. VETERINARY MEDICINE 2011; 2(5) 1-10.
113. Marta Lanza Perea, Sachin Kumthekar, Arathy Sabarinath, Sandor E. Karpathy, Ravindra N. Sharma and Diana M. Stone. Doxycycline treatment of asymptomatic Dogs seropositive for Ehrlichia canis. West Indian Veterinary Journal 2009 **9(2)**; 11-13 (Printed in 2011).
114. A. Chikweto, V. Mathew and R. N. Sharma. Failure to detect antibodies against Equine Infectious Anemia virus in donkeys (*Equus asinus*) from Grenada and Carriacou. West Indian Veterinary Journal (in press).
115. K. Tiwari, A. Chikweto, S. Kumthekar, M. I. Bhaiyat and R. N. Sharma. Hemoparasites in backyard poultry and wild pigeons of Grenada, West Indies. Journal of Animal Research **2 (2)**; 209-213; 2012.
116. Arathy Sabarinath, Gopalkrashnan P. Sabarinath, Keshaw P. Tiwari, Sachin Kumthekar, Derek Thomas, and Ravindra N. Sharma. Virological and Serological Surveillance of Avian Influenza in the Birds of Grenada. International Journal of Poultry Science **10 (8)** 579-582, 2011.
117. Diana M. Stone, Sachin Kumthekar, Alfred Chikweto, Derek Thomas, Keshaw Tiwari and Ravindra N. Sharma. Exposure to zoonotic abortifacients among sheep and goats in Grenada. International Journal of Animal and Veterinary advances, 2012; **4(2)**: 113-118.
118. R. N. Sharma, H. Hariharan, R. Roopnarine. Ciprofloxacin resistance in *Campylobacter* from chickens in Grenada. The Indian Journal of Veterinary Research **21 (1)**; 6-9; 2012.
119. Rohini Roopnarine, Diana Stone, Hary Hariharan, Claude DeAllie, Cherie Hand, Cecilia Hegamin-Younger, Vanessa Mathew, Ravindra Sharma. Fluoroquinolone and metronidazol resistance of *Campylobacter spp* from broiler chickens and antimicrobial uses on farms in Grenada, West Indies. Journal of animal research **2 (2)** 219-227 : 2012.
120. A. Chikweto, Bhaiyat, M. I., Tiwari K. P. deAllie, C. and Sharma R. N. Spirocercosis in owned and stray dogs in Grenada. Vet Parasitol. **190**: 613-616.2012.

121. Ross Peterson, Vanessa Mathew, Sam Chappell, Rob Davies, Regina Parker, Ravindra Sharma and Harry Hariharan. Salmonella serotypes and antimicrobial susceptibilities from Blue Land crab (*Cardisoma guanhumii*) in Grenada, West Indies. *Journal of Food protection* 76; 1270-1273, 2013.
122. Diana Stone, Margaret Davis, Katherine Baker, Tom Besser, Rohini Roopnarine, Ravindra Sharma. MLST genotypes and antibiotic resistance of *Campylobacter spp* in poultry in Grenada. *Biomedical Research International* Vol. 2013. Article ID 794643. 10 pages.
123. Joy Rachel C. Ganchingco, Kamashi Kumar, Diana Stone, Vanessa Mathew, Graeme Stratton, Ravindra Sharma , Harry Hariharan. *Campylobacter coli* and *C. jejuni* isolated from farmed pigs in Grenada, West Indies. And their antimicrobial resistance pattern. *Journal of Animal Research*, 2(2) 237-245: 2012.
124. Harry Hariharan, Kathryn Gibson, Ross Peterson, Matthew Frankie, Vanessa Matthew, Nancy A. Martin, Joshua B. Daniels, Linton Andrews, Tara Paterson , Ravindra N. Sharma. Confirmation of *Staphylococcus pseudointermedius* and *Staphylococcus schleiferi* subspecies *coagulans*, and antimicrobial drug resistance among the major bacterial isolates from 66 canine pyoderma cases in Grenada, West Indies. *Vet Med International*. Vol 2014. Article ID 850126, 7 pages.
125. Bhaiyat MI, Chikweto A, Tiwari KP, DeAllie C, Pawiaya RVS, Inga A, Hegamin Younger C, Sharma R. A retrospective study of canine tumors in Grenada, West Indies. *Advances in Animal and Veterinary Sciences*: **1 (5)** 134-139. 2013.
126. Bhaiyat MI, Hariharan H, Chikweto A, Tiwari K, Sharma R, and Kobayashi Y. Isolation of coagulase negative Staphyococci spp and Kocuria variencin pure culture from tissues of cases of mortalities in parrots in Grenada, West Indies. *Int. J. Vet. Med.- research and reports*. Vol. 2013. Article ID 149634, 6 pages.
127. Chikweto, A., Hariharan, Bhaiyat, M. I., Kumthekar, S. M., Tiwari, K. P., Dragon L, and Sharma RN. *Klebsiella pneumoniae* infection in a Squirrel Monkey (*Samiri Sciureus*) in Grenada, West Indies. *International Journal of Veterinary Medicine: Research and Reports*. Vol 2013 Article ID 264913, 4 pages.
128. Chikweto A, Tiwari K, Kumthekar S, Stone D, Louison B, Thomas D, Sharma R and Hariharan H. Serologic detection of antibodies to *Brucella spp* using a commercial ELISA in cattle in Grenada, West Indies. *Tropical Biomedicine* **30(2)**, 277-280, 2013.
129. Chikweto A, Tiwari KP, Kumthekar S, Langois Q, Gozlan J, Lanza M, Pateson T and Sharma RN. Exposure to *Brucella canis* in owned and stray dogs in Grenada,

West Indies. International Journal for Animal and Veterinary Advances. **5(2)**, 58-60. 2013

130. Chikweto A, Kumthekar S, Larkin H, DeAllie C, Tiwari KP, Sharma RN and Bhaiyat MI. Genital and extragenital Canine Transmissible Venereal Tumor in dogs in Grenada, West Indies. Open Journal of Veterinary Medicine, 2013. **3**, 111-114
131. Kumthekar S, Manning EJB, Ghosh P, Tiwari K, Sharma RN and Hariharan H. Mycobacterium avium subspecies para tuberculosis confirmed following serological surveillance of small ruminants in Grenada, West Indies Journal of Veterinary diagnostic investigation **25(4)** 527-530.2013.
132. Choudhary S, Zieger U, Sharma RN, Chikweto A, Tiwari KP, Ferreira LR, Oliveira S, Barkley L, Verma SK, Kwok OCH, Su C and Dubey JP. Isolation and RELF Genotyping of *Toxoplasma gondii* from the Mongoose (*Herpestes auro punctatus*) in Grenada, West Indies. Journal of Zoo and Wildlife Medicine **44(4)**: 1127-1130; 2013.
133. Dubey JP, Tiwari K, Chikweto A, DeAllie C, Sharma R, Thomas D, Chowdhary S, Ferreira L, Oliveira S, Verma S, Kwok OCH and Su C. Isolation and RELF genotyping of *Toxoplasma gondii* from the domestic dogs (*canis domesticus*) from Grenada, West Indies revealed high genetic variability. Veterinary Parasitology **197**: 623-626. (2013)
134. M. Herbers, H. Hariharan, V. Matthew, S. Oliveira, A. Rovira, R. N. Sharma and H. W. Ferguson. Photobacterium damsela in bigeye scad, *Selar crumenophthalmus* (Bloch1793) from Grenada, West Indies. Journal of Fish Diseases; Doi:10.1111/jfd 12149; 2013.
135. Peterson, R., Hariharan, H., Matthew, V., Stratton, G., Hegamin-Younger, C., Sharma R.N. (2014) Comparison of culture of goat milk with measurement of somatic cell count using a commercial kit and antimicrobial susceptibility of bacterial isolates. Int J Vet Med Res Rep. Vol. 2014. Article ID 710797, 6 pages.
136. Tiwari K, Chikweto A, Bhaiyat MI, DeAllie C, Stratton G, Sharma R. Serological evidence of Avian Pneumovirus infection in broiler and layer chickens in Grenada, West Indies. Journal of Animal Research. **Vol 3**: 43-46, 2013.
137. Tiwari K, Chikweto A, Thomas D, Hariharan H, Sis R and Sharma R. Bovine tuberculosis in Grenada, West Indies: current status. Int. J. Vet. Med: Research and reports Article **Vol. 2013**. ID 169877 DOI 10, 5171/2013.
138. A. Chikweto, kumthekar, S., Chawla, P. Tiwari, K. P., Lanza Perea, M., Paterson, T. and Sharma, R. N. (2014). Seroprevalence of *Trypanosoma cruzi* in stray and pet dogs in Grenada, West Indies. Tropical Biomedicine **31(2)**: 1-4.

139. Sharma R, Tiwari K, Chikweto A, Thomas D, Stratton G, Bhaiyat MI. Serologic evidence of chicken infectious anemia in layer and broiler chickens in Grenada, West Indies. *Veterinary World*: **7 (2)**; 59-61. 2014.
140. Stone, D., Chander, Y. Bekele, AZ., Goyal, SM., Hariharan, H., Tiwari, K., Chikweto, A., Sharma, R. Genotypes, antibiotic resistance and ST-8 genetic clone in *Campylobacter* isolates from sheep and goats in Grenada, *Veterinary Medicine International*: **Vol. 2014** Article ID 212864; 8 pages.
141. Sachin Kumthekar, Alfred Chikweto, Pranav Chawla, K. P. Tiwari, Jemie Gozlan, Quentin Langeois, Marta Lanza, Tara Paterson and R. N. Sharma. (2014) Servalence of canine Leishmaniasis in owned and stray dogs from Grenada, West Indies. *J. Anim. Res.* **4 (1)**: 131-139.
142. Keshaw Prasad Tiwari., Muhammad Iqbal Bhaiyat., Alfred Chikweto, Allison Inga, Ravindra Sharma, RVS Pawaiya. (2014) Immunohistochemical detection of P⁵³ tumor suppressor protein in round cell tumors of dogs in Grenada, West Indies. *Advances in Ani. Vet Sci.* **2 (35)**: 23-27.
143. Alfred Chikweto., Muhammad Iqbal Bhaiyat, Saul Mofya, Ravindra, N. Sharma (2014) Gnathostomiasis in a dog in Lusaka, Zambia. *Int J Vet Med. Res. & Rep.* Vol. 2015. Article ID 330445, 4 pages.
144. Ravindra N. Sharma, Gabriel Ordas, Keshaw Tiwari, Alfred Chikweto, Muhammad Iqbal Bhaiyat, Claude DeAllie, Tara Paterson. (2014) Prevalence of *Toxoplasma gondii* antibodies in stray and owned dogs of Grenada, West Indies. *Vet World* **Vol 7**, 661-664.
145. Ravindra N. Sharma, Morgan McMillan, Keshaw Tiwari, Alfred Chikweto, Derek Tomas, Muhammad Iqbal Bhaiyat (2014) Seroprevalcne of *Toxoplasma gondii* and *Neospora caninum* infection in cattle in Greanda, West Indies. *Global J. Med Res.* **Vol. 14 (2)** Version 1, 2014.
146. Ravindra N. Sharma, Keshaw P. Tiwari, Alfred Chikweto, Derek Thomas, Claude De Allie, Graeme Stratton and Muhammad Iqbal Bhaiyat (2014) Seroprevalcncce of five important viral diseases in commercial chickens in Grenada, West Indies. *Int J. Poult Sci.* **13(5)**: 299-303
147. Ravindra Sharma, Theresa Kimmitt, Keshaw Tiwari, Alfred Chikweto, Derek Thomas, Marta Lanza Perea, Muhammad Iqbal Bhaiyat (2015) Serological evidence of antibodies to *Neospora caninum* in stray and owned Grenadian dogs. *Tropical Biomedicine* **32 (2)**:1-8
148. K.P. Tiwari, M. I. Bhaiyat, A. Chikweto, R. N. Sharma, R. V. S. Pawaiya. 2014. Immunohistochemical detection of c-Myc oncoprotein in round cell tumors of dogs in Grenada, West Indies. *Indian J. Vet. Pathol.* **38 (3)**; 153-157.

149. Zieger,U., Marston, D. A. Sharma, R., Chikwet, A., Tiwari, K., Sayyid, M., Louison, B., Goharriz, K., Breed, A.C., Werling, D., Fooks, A.R., Horton, D. L. (2014). The phylogeography of rabies in Grenada, West Indies and prospects for control. PLOS; Negle Trop Dis. **8 (10)**: 1-11.
150. A. Chikweto., M.I. Bhaiyat., M. Lanza-Perea., S. Veytsman., K.Tiwari., C.De Allie., R.N. Sharma. (2014). Retrospective study of canine heartworm disease with caval syndrome in Grenada, West Indies. . Vet Parasitol **205**: 721-724. (doi.org/10.1016/j.vetpar. 2014.09.014).
151. Victor Amadi., Ross Peterson., Vanessa Matthew Belmar, Ravindra Sharma and Harry Hariharan. (2014). Prevalence and antibiotic susceptibility of Gram-negative aerobic bacteria cultures from the intestine and hepatopancreas of Blue Land Crab (*Cardisoma guanhumi*) in Grenada, West Indies. British microbiology Research Journal **5(2)**: 169-179. Article no. BMRJ. 2015.018.
152. Herbers, M., Hariharan, H., Matthew,V., Oliveira, S., Rovira,A., Sharma, R. N., Ferguson, H.W. (2014) *Photobacterium damsela* in jacks (*selar crumenophthalmus*) from Grenada, West Indies. J. Fish Diseases. **37**: 675-677.
153. Victor a Amadi, Vanessa Matthew Belmar, Keshaw Tiwari, Erica Brathwaite, Ravindra Sharma and Harry Hariharan (2014). Antimicrobial susceptibility profiles of *Escherichia coli* recovered from feces of young healthy domestic pigs in Grenada, West Indies. British microbiology research Journal. **5 (3)**: 300-3006.
154. Victor Amadi, Estafania Avendano, Ozioma A. Onyegbule, Zachary Pearl, Stratton Graeme, Ravindra Sharma and Harry Hariharan. (2015). Antimicrobial drug resistance in *Escherichia coli* including an O157:H7 isolate from feces of healthy goats in Grenada. Annual Research and Review in Biology. **7(1)**: 68-74.
155. Zachary Pearl, Graeme Stratton, Kathryn Elizabeth Gibson and Ravindra Sharma (2015) Quality and composition of goat milk in Grenada, West Indies: a preliminary study. (under review in Journal of Animal Science and Technology).
156. Ravindra N. Sharma, Alma Brejeon, Saloma Bruyant, Keshaw Tiwari, Alfred Chikweto and Muhammad Iqbal Bhaiyat. (2015) Seroprevalence of Newcastle Disease, Chicken Infectious Anemia and Avian Influeza in indigenous chickens in Grenada, West Indies. Journal of Animal research **5 (1)**: 1-5.
157. Ravindra N. Sharma, Keshaw tiwari, Alfred chikwet, Claude DeAllie, Muhammad Iqbal Bhaiyat. (2015). Prevalence of antibodies to *Toxoplasma gondii* and *Neospora caninum* in pigs in Grenada, West Indies. (2015). Open Journal of Veterinary Medicine, **5**: 138-141.
158. Victor Amadi, Ulrike Zieger, Ozioma, A. Onyegbule, V. Matthew Belmar, Ravindra Sharma and Harry Hariharan. (2015). Absence of *Escherichia coli* O157:H7 serotype in small Indian mongooses (*Herpestes auropunctatus*) in Grenada and

antimicrobial drug resistance of the non-0157 isolates. Annual Research and Review in Biology, **7(2)**:91-99.

159. Victor Amadi, Natalie Watson, Ozioma A. Onyegbule, Vanessa Matthew-Belmar, Estaphania Avendano, keshaw Tiwari, Ravindra Sharma, Harry Hariharan. (2015). Antimicrobial resistance profiles of *Escherichia coli* recovered from feces of healthy free range chickens in Grenada, West Indies. Int J current Microbiol and appl. Sci. **4(6)**: 168-175.
160. Sayyari M, Sharma R. 2011. Pathological and bacteriological study of lobe distribution of lesions in buffalo (*Bubalus bubalis*). Int J Vet Res. **5 (2)**: 125-128.
161. Alfred Chikweto., Muhammad Iqbal Bhaiyat, Saul Mofya, Ravindra, N. Sharma (2015) Gnathostomiasis in a dog in Lusaka, Zambia. Int J Vet Med. Res. & Rep. Vol. 2015; Article ID 330445. 4 pages.
162. R. Sharma, T. Kimmit, K. Tiwari, A. Chikweto, D. Thomas, Lanza Perea, M. Bhaiyat. (2015). Serological evidence of antibodies to *Neospora caninum* in stray and owned Grenadian dogs. Tropical Biomedicine. **32(2)**: 1-5.
163. R. Sharma, K. Tiwari, A. Chikweto, C. DeAllie, M. Bhaiyat (2015) Prevalence of antibodies to *Toxoplasma gondii* and *Neospora caninum* in pigs in Grenada, West Indies. Open Journal of Veterinary Medicine **5**: 138-141.
164. Victor Amadi, Estafania Avendano, Ozioma A. Onyegbule, Zachary pearl, Stratton Graeme, Ravindra Sharma and Harry Hariharan. (2015) Antimicrobial drug resistance in *Escherichia coli* including an O15:H7 isolate from feces of healthy goats in Grenada. Annual Research and Review in Biology **7(1)**: 68-74.
165. R. Sharma, B. Jehna, K. Tiwari, A. Chikweto, M. I. Bhaiyat 2015. Seroprevalence of *Toxoplasma gondii* in sheep and goats in Grenada, West Indies. Int. J. current Res and academic review. **3 (10)**: 262-267.
166. Hariharan H, Rovira A, Matthew Belmar V, Volger T, Stratton G, Sharma R. 2015. Gram-negative bacteria from pharynx and nasal cavity of domestic goats in Grenada, and resistance of *Mannheimia haemolytica* and *Bibersteinia trehalosi* to tulathromycin and trimethoprim-sulfamethoxazole. British Microbiol Res J. **11(1)**: 1-8.
167. Hariharan H, Tiwari Kp, Kumthekar S, Thomas D, Hegamin-Younger C, Edwards B, Sharma RN. 2015 Serological detection of caseous lymphadenitis in sheep and goats using commercial ELISA in Grenada, West Indies. Int J Vet Med-Res and reports. ID 473459, 7 pages . DIO: 10.5171/2015. 473459.

168. Ravindra Sharma, Jehna Bush, Keshaw Tiwari, Alfred Chikweto, Muhammad Iqbal Bhaiyat 2015. Seroprevalence of *Neospora caninum* in sheep and goats from Grenada, West Indies. *Open J vet Med.* **5**:219-223.
169. Sharma RN, Tiwari K, Matthew Belmar V, Kumar S, Goyal SM, Hariharan H. 2015 Prevalence and antimicrobial resistance of *Campylobacter* species isolated from backyard chickens in Grenada. *British Microbial Res J* **11(4)**:1-8.
170. Matthew Belmar V, Amadi A, Stone D, Subbarao C, Sharma R, Hariharan H. 2015. Antimicrobial resistance profiles of *Campylobacter jejuni* and *Campylobacter coli* recovered from feces of young healthy domestic pigs in Grenada. *Int. J Curr Microbiol Appl Sc.* **4**: 197-206.
171. Melissa Brown, A. Chikweto, R. Sharma 2015. A retrospective study of tumors in nasal and paranasal regions of dogs in Grenada, West Indies. *J Anim Res.* **5(3)**: 403-406.
172. Julia Coughlin, Melissa C Brown, Alfred Chikweto and Ravindra N Sharma. 2015. Squamous cell carcinoma in nasal and paranasal sinus in dogs in Grenada, West Indies.. *Indian J Vet Pathol.* **39(3)** 267-268.
173. K, Tiwari, Christine Cornish, Brittany Gamble, Derek Thomas, Ravindra N Sharma. 2016. Seroprevalence of Bovine Parainfluenza virus type-3 (bPI-3V) in ruminants from Grenada. *Open Journal of Veterinary Medicine* **6**: 23-27.
174. A. Chikweto, R. Sharma, Tiwari K, Verma SK, Calero-Bernal, Jiang T, Su C, Kwok OC, Dubey JP. 2017. Isolation and RELP genotyping of *Toxoplasma gondii* in free range chickens (*Gallus domesticus*) in Grenada, West Indies revealed widespread and dominance of clonal type III parasites. *Vet Parasitol* **103(1)**: 52-55.
175. Keshaw Tiwari, Christine Cornish, Brittany Gamble, Derek Thomas , Ravindra Nath Sharma. (2016) Seroprevalence of Bovine Parainfluenza Type 3 (bPI-3V) in Ruminants from Grenada. *Open J Vet Med.* **6**: 23-27.
176. Keshaw Tiwari, Jason Carloni, Derek Tomas, Claude De Allie, Alfred Chikweto, Cecilia Hegamin-Younger and Ravindra Nath Sharma. (2016). Prevalence of Gastrointestinal Parasites in stray dogs (*Canis familiaris*) from Grenada, West Indies. *Journal of Animal Research* **6 (1)**: 921-926.
177. Richard M. Kabuusu, Tracy Vogler, Sachin Kumthekar, Keshaw Tiwari, Alfred Chikweto, Muhammad Iqbal Bhaiyat, Claude De Allie, Ruth Alexander, Carla Richards, Ravindra N. Sharma (2016). Evaluation of Sensitivity and Positive Predictive Values of Cytopathologic Diagnosis of Solid Masses in dogs. *Open Journal of Veterinary medicine* **6**: 95-98.
178. Ravindra Sharma, Keshaw Tiwari, Vanessa Matthew Belmar, Sunil Kumar, Sagar M. Goyal, Victor A. Amadi, Natali Watson and Harry Hariharan. (2016). Prevalence and Antimicrobial Resistance of *Campylobacter* species isolated from

- Backyard Chickens in Grenada, West Indies. *British Microbiology Research Journal*. **11 (4)**: 1-8.
179. Harry Hariharan, Erica Brathwaite-Sylvester, Vanessa Matthew Belmar, Ravindra Sharma (2016). Bacterial isolates from urinary tract infection in dogs in Grenada, and their antibiotic susceptibility. *Open Journal of Veterinary Medicine* **6**: 85-88.
180. Ravindra Nath Sharma, Sureni Beckford, Keshaw Tiwari, Elodie Vinet, Derek Thomas, Claude de Allie, Alfred Chikweto (2016). Seroprevalence of Bluetongue virus antibody in ruminants from Grenada. *Open Journal of Veterinary Medicine*. **6**: 99-103
181. Ravindra Nath Sharma, Keshaw Tiwari, Alfred Chikweto, Claude DeAllie, Muhammad Iqbal Bhaiyat. Pulmonary adenocarcinoma in two dogs in Grenada, West Indies: case report. *Indian Journal of Veterinary Pathology* **40 (4)**: 368-371.
182. Kathryn O'Connell, Alfred Chikweto, Keshaw Tiwari, Mahesh Deokar and Ravindra N. Sharma (2016). Seroprevalence of *Toxoplasma gondii* in donkeys (*Aquus asinus*) from Grenada, West Indies. *Journal of Animal research*. **6 (3)**: 1-4.
183. Keshaw Tiwari, Sean Henary Manning, Kelsey Meyer, Carol Ponce, Claude DeAllie, Derek Thomas and Ravindra Nath Sharma. (2016) Seroprevalence of antibodies to bovine herpes virus Type -1 (BoHV-1 in ruminants of Grenada, West Indies. *J. Animal Research*, **6 (6)**: 1-4.
184. Amadi V., Vanessa, M.B., Chamarchy, S., Issac, K., Gireesh, R., Sharma, R., Hariharan, H., Stone, D. (2017) *Campylobacter* species isolated from pigs in Grenada exhibited novel clones; genotypes and antimicrobial resistance profiles of sequence types. *Foodborne Pathogens and Diseases* . **14 (7)**:1-7 DOI:10:1089/fpd.2016.2229.
185. K. O'Connell, K. Tiwari, A. Chikweto, M.I. Bhaiyat, R. N. Sharma. (2017) Epidemiological study of rabies (from 2001 to 2016) in Grenada, West Indies. *Open Journal of Veterinary Medicine* **2(2)**:45-50. Doi:10:17140/VMOJ-2-15.
186. K. Tiwari, Samantha W., McKayla D., Cassandra Tang Wing., C.DeAllie., Sharma, R.N. (2017). Detection of antibodies against bovine respiratory syncytial virus in ruminants of Grenada, West Indies. *Journal of Animal Research* **7(2)**:1-4.
187. Keshaw Tiwari, Muhammad Iqbal Bhaiyat, Romane Dufayet, Thomas Maufra, Claude DeAllie, Alfred Chikweto, Ravindra Nath Sharma (2017). Expression pattern of tumor markers in canine hemangiopericytoma . *Indian Journal of Veterinary Pathology*, **41(2)**: 84-88.
188. Victor A. Amadi, Harry Hariharan, Gitanjali Arya, Vanessa Matthew-Belmar, Roxanne Nicholas-Thomas, Rhonda Pinckney, Ravindra Sharma, Roger Johnson

(2017) Serovars and antimicrobial resistance of non-typhoidal *Salmonella* isolated from asymptomatic owned dogs in Grenada . *Veterinary Medicine and Science* (under review)

189. Ravindra Sharma,
Romane Dufayet,
Thomas Maufra,
Kathryn O'Connell
and
Keshaw Tiwari.
(2017).
Seroprevalence of
antibodies to
Astrovirus
in chickens
in Grenada,
West
Indies.
*Veterinary
World*,
10(6): 636-
639.

190. Melissa C. Brown, Alfred Chikweto, Keshaw Tiwari, Claude DeAllie, Muhammad Bhaiyat and Ravindra Sharma (2017). Prevalence of canine heartworm disease in stray dogs of Grenada, West Indies. *Open J Vet Med.* (under review)

191. A. Chikweto, R. Sharma, Tiwari K, Verma SK, Calero-Bernal, Jiang T, Su C, Kwok OC, Dubey JP. Isolation and RELP genotyping of *Toxoplasma gondii* in free-range chickens (*Gallus domesticus*) in Grenada, West Indies revealed widespread and dominance of clonal type III parasites. *Vet Parasitol.* **103 (1):** 52-55.

192. Alfred Chikweto, Keshaw Tiwari, Muhammad Bhaiyat, Jason Carloni, Kayla Pashain, Angela Pashain, Claude DeAllie, Ravindra Sharma. (2017) Gastrointestinal paparasites in small ruminants from Grenada, West Indies: a coprological survey and a review of necropsy cases (2002-2016). *Vet Parasitol*, (under review)

193. Alfred Chikweto, S. Veytsman, K. Tiwari, K. Cash, G. Straton, D. Thomas, R.N. Sahram. (2017). Prevalence of *Cryptosporidium* spp in a symptomatic small ruminants in Grenada, West Indies. *Vet Parasitol* (under review).

194. Amadi victor, Harry Hariharan, Keshaw Tiwari, Vanessa Matthew Belmar, Jisun Haan, Azad Singh, Sunil Kumar Mor, Sagar Goyal, Ravindra Sharma. (2017). Molecular typing of *Campylobacter* species isolated from healthy indigenous chickens in Grenada. *Foodborne Pathogens and Disease* (under review).
195. Ravindra Sharma, Keshaw Tiwari, Kristen Birmingham, Elan Armstrong, Andrea Montanez, Reneka Guy, Yvette Sepulveda, Veronica Mapp-Alexander, Claude DeAllie. *Taenia taeniformis* in Brown rats (*Rattus norvegicus*) in Grenada, West Indies. *Journal of Parasitology Research* (under review).
196. Tracy M. Vogler, Sachin Kumthekar, Keshaw Tiwari, Claude DeAllie, Ravindra Sharma. (2017) Current Status of *M. hyopneumonia* in pigs in Grenada, West Indies. *Open J Vet Med*, 7:77-84.