

CURRICULUM VITAE



- 1. Family name:** SANAA
2. First names: Moez
3. Date of birth: 14/10/1962
4. Nationality: French
5. Civil status: Married, Three children
6. Education:

Institution:	From... To...	Degree(s) or Diploma(s) obtained:
Faculty of Medicine, University Paris XI, France	09/1989 to 02/1993	Doctor of University of Paris XI (PhD), Public Health - Epidemiology
National School of Veterinary Medicine, Tunisia	09/1988 to 09/1989	Doctor of Veterinary Medicine Diploma
Faculty of Medicine, University Paris XI, France	09/1987 to 09/1988	Master in Statistics and Public Health
National Veterinary School, Maisons Alfort, France	10/1986 to 06/1987	Diploma of Animal Epidemiology
ISUP, University Paris VI, France	10/1986 to 06/1987	Diploma of Statistics in Medical Biology
National School of Veterinary Medicine, Tunisia	10/1980 to 06/1985	Veterinary Medicine Diploma

7. Language skills: (5=excellent; 1=basic)

Language	Reading	Speaking	Writing
French	"Mother Tongue"		
English	5	4	4
Arabic	5	3	3

8. Membership of professional bodies:

- Member of **EFSA Biological Hazards** expert panel (2012-2018)
- Member of **EFSA animal health and animal welfare** expert panel (2006-2012)
- Participating to IDF (International Dairy Federation) Task forces and steering committees
- Member of **SRA** (Society of Risk Analysis, since 1998). Vice Chair of Microbial Risk Analysis Speciality Group.

9. Other skills:

Computer literacy: Microsoft office (advanced user including Excel VBA), SAS system, @Risk, R, Winbugs.

10. Present position:

Scientific advisor / Leadership of Risk assessment methodology mission (Risk assessment Directorate, ANSES: French agency for food, environmental and occupational health and safety). The mission aims at increasing our scientific capacity, extending the evidence base, building collaboration between the different expert panels, dedicating expert in several fields and prioritizing effort and resources.

11. Years within ANSES: **5.5 years**

12. Key qualifications:

Food safety - Risk Assessment and management – collective expertise organization – Multicriteria Decision Analysis - Analytical Epidemiology – Mathematical modelling in food microbiology and in public health – Advanced Statistical Analysis techniques including mixed models, survival analysis and Bayesian approaches – Animal Health and Animal Welfare –Foodborne and Infectious disease epidemiology –Monitoring and surveillance systems – Data management and warehousing – Knowledge management system development.

13. Specific experience abroad on technical and scientific workshops organisation and consultancy:

Country	Language	Date (Duration)	Subject
Nakuru, Kenya	English	Marsh 2015 (7 days)	Training for KEBS on food safety (chemical and microbiological risk), standards and market access programme (smap)
Naivasha, Kenya	English	January 2015 (10 days)	Training for DVS on animal health and welfare risk analysis, standards and market access programme (smap)
Nakuru, Kenya	English	December 2014 (10 days)	Training for dvs on food safety (chemical and microbiological risk), standards and market access programme (smap)
Paris, France	English	September 2013 (1 day)	Workshop in ICPMF8: Risk Based Control Measures in Food Establishments.
Nairobi, Kenya	English	June - December 2013	Consultancy within EDES programme. My mission was to provide a scientific support to the local team on developing good hygien practices guide (fish anf fish products)
Dakar, Senegal	French	October 2012 – January 2013	Consultancy within EDES programme. My mission was to provide a scientific support to the local team on developing good hygien practices guide (fish anf fish products)
Dubai, UAE	English	February 2012 (1 day)	Microbial Risk Assessment and Mitigation Workshop: towards a Quantitative HACCP Approach
Pulaway, Poland	English	October 2011 (5 Days)	Consultancy: Food safety Microbial Risk assessment
Riga, Latvia	English	August 2010 (5 Days)	Workshop on Animal health and food safety surveillance system
Rabat, Morocco	French	June 2010 (3 Days)	Consultancy: FAO, Animal health prioritisation workshop
Lisbon, Portugal	English	April 2009 (4 Days)	Application of the Risk Assessment to Waterborne Diseases
Cotonou, Bénin	French	February 2009 (4 Days)	FAO, Food safety risk management – Monitoring food contamination by Chemical and microbial hazards
Brussels, Belgium	English	May 2009 (2 Days)	DG-SANCO Risk assessment workshop for risk managers (Food safety and Animal health)
Saclay, France	French	January 2009 (5 Days)	Danone international - Quantitative Microbial risk assessment
French Polynisia	French	November 2008 (10 Days)	Pearl Oyster disease monitoring and surveillance program and infectious disease introduction risk assessment.
Parma, Italy	English	February 2007 (7 Days)	EFSA- Animal Health Risk Assessment Workshop
Oslo, Norway	English	June 2006 (5 Days)	Veterinary School - Microbial Risk assessment, in Food safety Master
Paris, France	French	March 2006 (4 Days)	Application of the Risk Assessment to Waterborne Diseases (Suez Environment)
Barcelona, Spain	English	October 2005 (5 Days)	Fifth International Workshop in Microbial Risk Analysis
Italy, Rome	English	June 2005 (5 Days)	Fourth International Workshop in Microbial Risk Analysis

Mexico	English	February - May 2005 (10 Days)	Microbial Risk assessment
Ottawa, Canada	English	April 2005 (5 Days)	Risk Analysis of Zoonotic Diseases, CFIA, Health Canada
Pamplona, Spain	English	June 2004 (5 Days)	Third International Workshop in Microbial Risk Analysis
Paris, France	English	June 2003 (5 Days)	Second International Workshop in Microbial Risk Analysis
Lisbon Portugal	English	June 2002 (5 Days)	First International Workshop in Microbial Risk Analysis
Saint-Hyacinthe, Canada	French	January 2002 (5 Days)	Statistical Analysis of veterinary correlated data
Fort-Collins, Colorado, USA	English	January 2000 (3 Days)	Statistical Analysis of veterinary correlated data
Paris, France	English	July 1997 (3 Days)	Statistical Analysis of veterinary correlated data
Africa (Tunisia, Madagascar, Congo),	French	1998 - 2003	Expert missions (8 weeks) International Atomic Energy Agency, Animal production and animal health programme. Several missions : diagnostic techniques (ELISA) and surveillance systems

14. Professional Experience:

From to...	Location	Company	Position	Description
01/09/2009 to present	France	Anses	Scientific Advisor/ Head of foods safety risk assessment unit	Support the Director of Risk assessment department in the development and implementation of strategic plan for sound science risk assessment. Coordinate strategic project such as the creation of the French national food safety observatory involving all food chain stakeholders. Mentoring, coaching and supporting career development and staff capacity development: PhD supervisor, Post-Doc supervisor, organisation of internal practical workshops to facilitate the implementation of risk assessment and working group management tools. Participation to international conferences and symposium to present Anses risk assessment activities. Create a new expert panel dealing with risk assessment methodology: recruitment of high qualified external experts covering the five domains of Anses activities (Food and nutrition, Animal health, Plant Health, occupational health and Environmental health), coordination and facilitation of the risk assessment harmonization efforts. Manage and advise different key project teams: e.g. evaluation of animal feeding trials, aggregate exposure, foodborne illness source attribution, Anses risk assessment methodology capacities.
2005-2009	France	Dairy Council, CNIEL	Responsible of Risk assessment innovation	This programme involved a panel of scientists working in the main French companies and representatives of the main dairy products

			programme	syndicates and involved 5 scientists (two mathematicians, 1 veterinarian and 1 microbiologist and food technologist). Today the production of this programme has been transferred to ACTILAIT (Dairy Technical institute) and used daily by this institute to offer to dairy industry sector a quantitative risk assessment and management services.
01/01/1999 to 30/08/2009	Maisons Alfort, France	National Veterinary School	Maître de Conférences (Associate Professor)	1- Head of Epidemiology and Risk Analysis research unit 2- Teaching activities: - Foodborne Disease epidemiology in Risk Analysis for food and feed bi-contaminants Master, - Risk assessment modelling in Risk Analysis for food and feed bi-contaminants Master, - Basic in Biostatistics, Biostatistics and Epidemiology, Veterinary Clinical Research Methodology and Biostatistics applied to food safety, 55 hours/year, coordination and lecturing, since 1999. 3- Research activities: Animal epidemiology and Microbial Risk Assessment and Risk Analysis. Biostatistics. Clinical trials. <i>Food pathogens: Listeria monocytogenes</i> in dairy products, <i>Salmonella</i> in meat and dairy products, Development of Real-Time PCR MPN techniques, STEC <i>E. Coli</i> in dairy and meat products. <i>Animal diseases: Brucellosis</i> and tuberculosis screening and diagnostic strategies, Fertilities disorders, Newborn calves Gastroenteritis risk factors study, animal exposure to heavy metals studies. 4- Publication: in international and national peer reviewed journal, of text books and elaboration of web training portal
1/04/1992 to 31/12/1998	Maisons Alfort, France	National Veterinary School	Ingénieur de Recherches	1992-1995 1- Development and implementation of new quantitative epidemiological research activities within the animal production department. 1996-1998 1- Head of the unit epidemiology and health actions evaluation

16. Other relevant information:

- **Chairing the prototyping study for the French Food Safety Observatory (2012-2013):** The French Food Safety Observatory (FFSO) aims to create a national database for central storage of analytical results from feed and food samples taken by enforcement authorities as part of their official controls or monitoring programs and by food business operators as part of their food safety management plan. The observatory includes also data related to the food safety management activities. The FFSSO's objectives: On one hand, is to follow the evolution of the sanitary quality of processed food by market segment and on the other hand to strengthen the partnership between public authorities and the food industry to improve public health and to meet consumers' expectations more effectively.
- Supervision of **Master and PhD students:** 20
- **Funding in the last 5 years:** Specification of data collection on animal diseases to increase the preparedness of the Animal Health and Animal Welfare panel to answer future mandates – EFSA – EU; Quantitative HACCP in food establishment, ANRT; BIOTRACER, FP6 – EU; Quantitative

risk assessment methodology, CNIEL; Microbial Risk assessment as a risk management tool, Ministry of Agriculture, DGAL; Antibiotic resistance salmonella in dairy farms, Ministry of Agriculture, DGAL.

17. Developed Risk Assessment models and tools

- Risk ranking tools – animal health and food safety
- Sampling design tools adapted to animal health surveillance systems and food safety management systems
- Risk ranking tools (chemicals and microbial hazards)
- Dynamic microbial predictive microbiology
- Statistical analysis routines adapted to milk quality monitoring and management
- Microbial transfer rates and cross-contamination modeling
- Risk assessment of *Listeria monocytogenes* in different type of cheeses made with pasteurized and unpasteurised milk
- Risk assessment of Salmonella and STEC in various dairy products
- Food Safety Objectives, Performance Objectives, Performance Criteria assessment tools
- Risk based sampling tools
- Multi Criteria Decision Analysis tools
- Key performance indicators

18. Publications

Scientific reports

1. Scientific Opinion on the development of a risk ranking toolbox for the EFSA BIOHAZ Panel. EFSA Journal 2015;13(1):3939[131 pp.]. **Contribution: risk assessor.**
2. Scientific Opinion on the public health risks related to the consumption of raw drinking milk. EFSA Journal 2015;13(1):3940[95 pp.]. **Contribution: risk assessor.**
3. Specification of data collection on animal diseases to increase the preparedness of the AHAW panel to answer future mandates – CFP/EFSA/AHAW/2010/01. **Contribution: Chairman.** November 2012.
4. Guidance on Animal welfare risk assessment. **Contribution: Chairman.** February 2012.
5. Campylobacter in broiler meat - Risk assessment and control options. EFSA, Journal 2011. **Contribution: microbial risk assessor.**
6. Quantitative risk assessment on Salmonella in slaughter and breeder pigs. EFSA, 2010. **Contribution: microbial risk assessor.**
7. Scientific Opinion Concerning the Welfare of Animals during Transport. EFSA Journal 2011;9(1):1966 [125 pp.]. doi:10.2903/j.efsa.2011.1966. **Contribution: Risk assessor**
8. Scientific Opinion on Epizootic Hemorrhagic Disease. EFSA Journal 2009; 7(12):1418 [67 pp.]. doi:10.2903/j.efsa.2009.1418. **Contribution: Risk assessor**
9. Guidance on Good Practice in Conducting Scientific Assessments in Animal Health using Modelling. EFSA Journal 2009; 7(12):1419 [38 pp.]. doi:10.2903/j.efsa.2009.1419. **Contribution: Working group member**
10. Animal health safety of fresh meat derived from pigs vaccinated against Classic Swine Fever. doi:10.2903/j.efsa.2009.933. **Contribution: Working group member**
11. Risk of Bluetongue Transmission in Animal Transit - Scientific Opinion of the Panel on Animal Health and Welfare. Doi: 10.2903/j. efsa. 2008.795. **Contribution: Risk assessor.**
12. The risks associated with tail biting in pigs and possible means to reduce the need for tail docking considering the different housing and husbandry systems - Scientific Opinion of the Panel on Animal Health and Welfare. doi:10.2903/j.efsa.2007.611. **Contribution: Risk assessor.**
13. Animal health and welfare aspects of different housing and husbandry systems for adult breeding boars, pregnant, farrowing sows and unweaned piglets[1] - Scientific Opinion of the Panel on Animal Health and Welfare. doi:10.2903/j.efsa.2007.572. **Contribution: Risk assessor.**
14. Opinion of the Scientific Panel on Animal Health and Welfare on a request from the Commission related to animal health and welfare in fattening pigs in relation to housing and husbandry. doi:10.2903/j.efsa.2007.564. **Contribution: Risk assessor.**

15. Opinion of the Scientific Panel on Animal Health and Welfare (AHAW) on request from the Commission on bluetongue vectors and vaccines. doi:10.2903/j.efsa.2007.479. **Contribution: Risk assessor.**
16. Opinion of the Scientific Panel on Animal Health and Welfare (AHAW) on the EFSA Selfmandate on bluetongue origin and occurrence. doi:10.2903/j.efsa.2007.480. **Contribution: Risk assessor.**
17. Opinion of the Scientific Panel on Animal Health and Welfare (AHAW) on a request from the Commission regarding an assessment of the risk of rabies introduction into the UK, Ireland, Sweden, Malta, as a consequence of abandoning the serological test measuring protective antibodies to rabies. doi:10.2903/j.efsa.2007.436. **Contribution: Risk assessor.**
18. Opinion of the Scientific Panel on Animal Health and Welfare (AHAW) related with the Animal health risks of feeding animals with ready to use dairy products without further treatment. doi:10.2903/j.efsa.2006.347. **Contribution: Risk assessor.**

International peer reviewed papers

1. PERRIN F., V. MICHEL, F. TENENHAUS-AZIZA, M. **SANAA**. Quantitative risk assessment of Hemolytic and Uremic Syndrome linked to O157:H7 and non-O157:H7 Shiga-toxin producing Escherichia. coli strains in raw milk soft cheeses. Risk Analysis. 2015, vol 35(1): 109-128.
2. BEMRAH N, JEAN J, RIVIÈRE G, **SANAA** M, LÉCONTE S, BACHELOT M, DECEUNINCK Y, BIZEC BL, DAUCHY X, ROUDOT AC, CAMEL V, GROB K, FEIDT C, PICARD-HAGEN N, BADOT PM, FOURES F, LEBLANC JC. Assessment of dietary exposure to bisphenol A in the French population with a special focus on risk characterisation for pregnant French women. Food Chem Toxicol. 2014 Oct; 72:90-7.
3. LAMBONI M., M. **SANAA**, F. TENENHAUS-AZIZA. Sensitivity Analysis for Critical Control Points Determination and Uncertainty Analysis to Link FSO and Process Criteria: Application to Listeria monocytogenes in Soft Cheese Made from Pasteurized Milk. Risk Analysis. 2014, vol 34 (4): 751-764.
4. TENENHAUS-AZIZA F., JJ. DAUDIN, A. MAFFRE, M. **SANAA**. Risk-Based Approach for Microbiological Food Safety Management in the Dairy Industry: The Case of *Listeria monocytogenes* in Soft Cheese Made from Pasteurized Milk. Risk Analysis. 2014, vol 34 (1): 56-74.
5. NAUTA M.J., M. **SANAA**, A.H. HAVELAAR. Risk based microbiological criteria for Campylobacter in broiler meat in the European Union. Int J Food Microbiol. 2012, 158, 3, 209-217.
6. SCHVARTZMAN M.S., A. MAFFRE, F. TENENHAUS-AZIZA, M. **SANAA**, F. BUTLER, URSULA GONZALES-BARON and K. JORDAN. Modelling the fate of Listeria monocytogenes during manufacture and ripening of smeared cheese made with pasteurised or raw milk. Int J Food Microbiol. 2011, 145, S31-S38.
7. SAVINI G, AFONSO A, MELLOR P, ARADAIB I, YADIN H, SANAA M, WILSON W, MONACO F, DOMINGO M. Epizootic haemorrhagic disease. Res Vet Sci. 2011 Aug; 91(1):1-17.
8. GARRIDO V., I. GARCIA-JALON; I. VITAS Ana.; M. **SANAA** ; Listeriosis risk assessment: Simulation modelling and "what if" scenarios applied to consumption of ready-to-eat products in a Spanish population Food control. 2010, vol. 21(3): 231-239
9. HAVE P, ALBAN L, BERNDTSSON LT, CLIQUET F, HOSTNIK P, RODEIA SC, **SANAA** M. Risk of rabies introduction by non-commercial movement of pets. Dev Biol (Basel). 2008;131:177-85.
10. PRESI P, STARK KD, KNOPF L, BREIDENBACH E, **SANAA** M, FREY J, REGULA G. Efficiency of risk-based vs . random sampling for the monitoring of tetracycline residues in slaughtered calves in Switzerland. Food Addit Contam Part A Chem Anal Control Expo Risk Assess. 2008 May;25(5):566-73.
11. DAVID I. , LORINO T. and **SANAA** M. Bayesian versus frequentist approach of the frailty Cox model, application to calf gastroenteritis. Communication in statistics (simulation and computation) 2007, 36(6).
12. Rieu E, Duhem K., Vindel E., **SANAA** M. FSO should integrate the variability of the concentration of pathogen. Risk Analysis, 2007 Apr;27(2):373-86.
13. RIEU E, RECCA A, BENET JJ, **SANAA** M, DORCHIES P, GUILLOT J. Reliability of coprological diagnosis of Paramphistomum sp. infection in cows. Vet Parasitol. 2007 May 31;146(3-4):249-253.
14. AZIZA F, METTLER E, DAUDIN JJ, **SANAA** M. Stochastic, compartmental, and dynamic modeling of cross-contamination during mechanical smearing of cheeses. Risk Anal. 2006 Jun;26(3):731-45.
15. FANCHON L, VALETTE JP, **SANAA** M, GRANDJEAN D. The measurement of ground reaction force in dogs trotting on a treadmill: an investigation of habituation. Vet Comp Orthop Traumatol. 2006;19(2):81-6.

16. CREVIER-DENOIX N, ruel Y, Dardillat C, JERBI H, **SANAA** M, Collobert-LAUGIER C, RIBOT X, DENOIX JM, POURCELOT P. The measurement of ground reaction force in dogs trotting on a treadmill: an investigation of habituation. *Vet Comp Orthop Traumatol*. 2006;19(2):81-6.
17. LAILLER R, **SANAA** M, CHADOEUF J, FONTEZ B, BRISABOIS A, COLMIN C, MILLEMANN Y. Prevalence of multidrug resistant (MDR) Salmonella in bovine dairy herds in Western France. *Prev Vet Med*, accepted on March 2005.
18. LORINO T, DAUDIN JJ, ROBIN S, **SANAA** M. Factors associated with time to neonatal diarrhoea in French beef calves. *Prev Vet Med*. 2005 May 10;68(2-4):91-102.
19. **SANAA, M.**, L. COROLLER, O. CERF. Risk assessment of listeriosis linked to the consumption of two soft cheeses made from raw milk: Camembert of Normandy and Brie of Meaux. *Risk Anal*. 2004 Apr;24(2):389-99.
20. LORINO T, M. **SANAA**, S. ROBIN, and J.-J. DAUDIN. Comparison of Semiparametric Regression Models. for Correlated Survival Data Using Simulations. *Communications in Statistics, Theory and Methods*. , 2004, 33, 1975–1991
21. CHAHORY S, CLERC B, GUEZ J, **SANAA** M. Intraocular pressure development after cataract surgery: a prospective study in 50 dogs (1998-2000). *Vet Ophthalmol*. 2003 Jun;6(2):105-12.
22. BEMRAH N , H. BERGIS, C. COLMIN, A. BEAUFORT, Y. MILLEMANN, B. DUFOUR, J.J. BENET, O. CERF and **M. SANAA** : Quantitative risk assessment of human salmonellosis from the consumption of a turkey product in collective catering establishments. *Int. J. Food Microbiol*. 2003, 80, 17-30.
23. GODFROID J, SAEGERMAN C, WELLEMAN S, WALRAVENS K, LETESSON JJ, TIBOR A, Mc MILLAN A, SPENCER S, **SANAA** M, Bakker D, Pouillot R, Garin-Bastuji B. How to substantiate eradication of bovine brucellosis when aspecific serological reactions occur in the course of brucellosis testing. *Vet Microbiol*. 2002 Dec 20; 90(1-4):461-77.
24. **SANAA** M, [Are data collected in France sufficient for a quantitative analysis of food-related infections?] *Rev Epidemiol Sante Publique*. 2002 Jan;50(1):81-8. French.
25. MEYER-BROSETA S., S. N. BASTIAN, P. D. ARNÉ, O. Cerf and **M. SANAA**. Review of epidemiological surveys on the prevalence of contamination of healthy cattle with Escherichia coli serogroup O157. *Int J Hyg Environ Health*. 2001 May;203(4):347-61.
26. CREVIER-DENOIX N, ROOSEN C, DARDILLAT C, POURCELOT P, JERBI H, **SANAA M**, DENOIX JM. Effects of heel and toe elevation upon the digital joint angles in the standing horse. *Equine Vet J Suppl* 2001 Apr;(33):74-8
27. BENDALI (F), **SANAA** (M) , BICHET (B), SCHELCHER (F). Risk Factors associated with diarrhea in newborn calves, *Vet. Research*, 1999, **30**, 509-522.
28. **SANAA** M, BEMRAH N, MEYER S, CERF O, MOHAMMED H. [Quantitative risk assessment related to microbial food contamination]. *Rev Epidemiol Sante Publique*. 2000 Aug;**48** Suppl 2:11-22. French.
29. BENDALI (F), BICHET (H), SCHELCHER (F), **SANAA** (M). Pattern of diarrhea in newborn beef calves in southwest France. *Vet . Research*, 1999, **30**, 61-74.
30. CHETBOUL V, ADAM M, DEPRez I, AMBRIOVIC A, ROSENBERG D, CRESPEAU F, **SANAA M**, PHAM I, ELOIT M, ADNOT S, POUCHELON JL. Expression of biologically active atrial natriuretic factor following intrahepatic injection of a replication-defective adenoviral vector in dogs. *Hum Gene Ther*. 1999 Jan 20;**10**(2):281-90.
31. OULD-AMROUCHE (A), KLEIN (F), (C) OSDOIT, (HO) MOHAMMED, (A) TOURATIER, (**M**) **SANAA** and (JP) MIALOT. Estimation of Neospora caninum seroprevalence in dairy cattle from Normandy, France. *Vet. Research*, 1999, 30, 531-538.
32. BEMRAH (N), **SANAA** (M), CASSIN (MH), GRIFFITHS (M) and CERF (O). Quantitative risk assessment of Listeria monocytogenes in soft cheeses made from raw milk. *Prev. Vet. Med.*, 1998, **37** 129-145.
33. CREVIER-DENOIX (N), COLLOBERT (C), **SANAA** (M), BERNARD (N), JOLY (C), POURCELOT (P), GEIGER (D), BOUSSEAU (B) and DENOIX (JM). Mechanical correlations derived from segmental histologic study of the equine superficial digital flexor tendon, from foal to adult. *Am. J. Vet. res.*, 1998, **59**, 969-977.
34. POUILLOT (R), LESCOAT (Ph), GARIN-BASTUJI (B), REPIQUET (D), TERRIER (P), GERBIER (G), BENET (JJ) and **SANAA** (M). Retrospective epidemiological survey on false positive reactions in bovine brucellosis in Saône et Loire. *Prev. Vet. Med.*, 1998, **35**, 165-179.
35. LE POTIER (MF), FOURNIER (A), HOUDAYER (C), HUTET (E), AUVIGNE (V), HERY (D), **SANAA** (M) and TOMA (B). Use of muscle exsudates for the detection of anti-gE antibodies of Aujeszky virus. *Vet. Rec.*, 1998, **143**, 385-387.

36. CREVIER-DENOIX (N), COLLOBERT (C), POURCELOT (P), DENOIX (JM), **SANAA** (M), GEIGER (D), BERNARD (N), RIBOT (X), BORTOLUSSI (C), BOUSSEAU (B). Mechanical properties of pathological equine superficial digital flexor tendons. *Equine Vet. J.*, 1997, Suppl. **23** : 23-26.
37. CREVIER-DENOIX (N), POURCELOT (P), COLLOBERT (C), BERNARD (N), **SANAA** (M), GEIGER (D) et DENOIX (JM). Variations of local strain and modulus of elasticity along the equine superficial flexor tendon in relation to its architecture. *Equine Vet. J.*, 1997, Suppl. **23** : 27.
38. PONSART (C), **SANAA** (M), HUMBLLOT (P), GRIMARD (B), JEANGUYOT (N), PONTER (AA), VIEL (JF) and MIALOT (JP). Variation factors of pregnancy rates after estrus synchronisation treatment in French Charolais beef cows. *Vet. Research*, 1996, **27**, 227-239.
39. CREVIER (N), POURCELOT (P), DENOIX (J.M.), GELGER (D), BORTOLUSSI (C), RIBOT (X) and **SANAA** (M). Segmental variations of in vitro mechanical properties in equine superficial digital flexor tendons. *Ann. J. Vet. Res.*, 1996, 57 (B), 1111-1117.
40. BARRAT (F), LESOURD (BM), LOUISE (A), BOULOUIS (HJ), VINCENT-NAULLEAU (S), THIBAUT (D), **SANAA** (M), NEWAY (T) and PILET (Ch). Surface antigen expression in spleen cells of C57Bl/6 mice during ageing : influence of sex and parity. *Clin. Exp. immunol.*, 1997, **107**, 593-600.
41. BENET JJ, **SANAA M**, DUFOUR B, TOMA B. [Methodology of surveys in animal epidemiology] *Rev Elev Med Vet Pays Trop.* 1993;46(3):403-22. French.
42. **SANAA, M.**, C. PUYALTO, B. GRIMARD and P. HUMBLLOT. Binary correlated data analysis: A model's review and applications to veterinary epidemiology. *Kenya Veterinarian.* 1994, 18(2),152-154.
43. **SANAA, M.**, B. POUTREL, J.L. MENARD and F. SERIEYS. Risk factors associated with contamination of raw milk by *Listeria monocytogenes* in dairy farms. *J. Dairy Sci.*, 1993, 2891-2898.

National peer reviewed publications/books

44. **SANAA M**, MOHAMMED H. Zoonotic diseases Risk Assessment and Mitigation. 2007. In *microbial Food Contamination*. Chap. 17 : 471-495.
45. **SANAA M.** (2002). Epidémiologie et Anlyse des risques in *Techniques Mathématiques pour l'Industrie Agroalimentaire* (Daudin JJ., Duby C., eds), chap 11.: Lavoisier, Éditions TEC et DOC.
46. TOMA B, B. DUFOUR et **M. SANAA**. Généralités sur l'analyse des risques. *Epidémiol. et santé anim.*, 2002, 41, 5-17.
47. POUILLOT R, M. **SANAA**. Bases probabilistes et statistiques nécessaires à l'appréciation du risque. *Epidémiol. et santé anim.*, 2002, 41, 67-83.
48. TOMA B., R. POUILLOT et **M. SANAA**. Appréciation quantitative du risque : Exemples d'approche déterministe. *Epidémiol. et santé anim.*, 2002, 41, 85-94.
49. POUILLOT R, M. SANAA et B. DUFOUR. Principes de l'appréciation quantitative probabiliste des risques. *Epidémiol. et santé anim.*, 2002, 41, 95-112.
50. **SANAA M.**, R. POUILLOT, B. TOMA. Appréciation quantitative des risques : exemple d'utilisation de la méthode de simulation de Monte-Carlo. *Epidémiol. et santé anim.*, 2002, 41, 145-155.
51. **SANAA M.**, O. CERF. La démarche d'analyse quantitative des risques de maladies infectieuses transmissibles par les aliments. *Epidémiol. et santé anim.*, 2002, 41, 157-168.
52. **SANAA M.** Microbiologie prévisionnelle : principaux modèles de croissance utilisés en appréciation quantitative des risques. . *Epidémiol. et santé anim.*, 2002, 41, 168-178.
53. KLEIN F, OULAMROUCHE A., OSDOIT C., TOURATIER a et **SANAA M**. *Neospora caninum* : une enquête séro-épidémiologique dans l'Orne. *Bull. des GTV.* 2000, 7, 35-41.
54. TOMA B, VAILLANCOURT JP, DUFOUR B, ELOIT M, MOUTOU F, MARSH W, BENET JJ, **SANAA M**, MICHEL P. *Dictionary of Veterinary epidemiology.* 1999. IOWA State University. pp284.
55. MOHAMMED, H.O., S. WADE and **M. SANAA**. Analysis of clustered data with binary outcomes: *Giardia* in dairy cattle. *Epidémiol. et santé anim.*, 1998, **34**, 151-157.
56. POUILLOT, R., Ph. LESCOAT, V. BATUT-GRICOURT, B. GARIN-BASTUJI, JJ. BENET et M. **SANAA**. Enquêtes cas/témoins sur les réactions sérologiques non spécifiques en Brucellose bovine en Saone et Loire. *Epidémiol. et santé anim.*, 1998, **34**, 127-133.
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58. TOMA (B), DUFOUR (B), BONJOUR (P), **SANAA** (M), ANGOT (JL). A method for incorporating the evaluation of a veterinary services and surveillance programs in animal health risk assessments. Annual conference Soc. for risk analysis-Europe, 11-14 oct. 1998.

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61. TOMA (B), **SANAA (M)** et DUFOR (B). Proposition de modification méthodologique de l'analyse du risque de maladies animales associé à l'importation d'animaux ou de produits d'origine animale. *Epidémiol. santé anim.*, 1996, **30**, 45-59.
62. TOMA B., B. DUFOR, **M. SANAA**, J.J. BENET, P. ELLIS, F. MOUTOU et A. LOUZA. *Epidémiologie Appliquée à la lutte collective contre les maladies animales transmissibles majeures*, AEEMA, 1996, 551 pp.
63. BENET J.J., **M. SANAA**, B. DUFOR et B. TOMA. Méthodologie des enquêtes en épidémiologie animale. *Epidémiol. Santé Anim.* 1994, 25, 1-44.
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65. **SANAA M.** Epidémiologie de la contamination du lait à la ferme par *Listeria monocytogenes*. *Epidémiol. Santé Anim.* 1994, 24, 155-169.
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67. **SANAA M.**, et J.L. MENARD. Contamination du lait cru par *Listeria monocytogenes* : origines, facteurs de risque, prévention. *Rec. Méd. Vét.*, 1994, 170 (6/7), 437-442.
68. **SANAA M.**, G. GERBIER, M. ELOIT et B. TOMA. Echantillonnage dans les enquêtes descriptives. *Epidémiol. Santé Anim.* 1994, 25, 45-67.
69. SCHELHER, F. et **M. SANAA**. Prophylaxie des infections à *Listeria monocytogenes* chez les êtres vivants. *Epidémiol. Santé Anim.* 1994, 24, 33-40.
70. **SANAA M.** Epidémiologie de la contamination du lait à la ferme par *Listeria monocytogenes*. Thèse Doctorat Univ. Paris XI, 1993, 207 pp.
71. TOMA B., J.J. BENET, B. DUFOR, M. ELOIT, F. MOUTOU et **M. SANAA**. *Glossaire d'épidémiologie animale*. Maisons Alfort, Editions du Point Vétérinaire, 1991, 365 pp.

Communications in international congresses or symposiums

1. **SANAA M.** What's new in MRA-Microbiological Risk Assessment? Hot topics in food microbiology conference 28-29 October 2014, Campden BRI, Chipping Campden, Gloucestershire, GL55 6LD, UK. Invited speaker
2. **SANAA M.** How to express the uncertainty? Application to risk ranking. Symposium: Uncertainty in Microbial Risk Assessment. Society of Risk Assessment Annual Meeting. Denver, Colorado, 7-11 Decmeber 2014.
3. **SANAA M.** Evaluation of the performances of the existing methods for public health-based risk ranking of microbial hazards in the food chain. Society of Risk Assessment Annual Meeting. Denver, Colorado, 7-11 Decmeber 2014.
4. **SANAA M.**, PERRIN F., TENENHAUS-AZIZA F. Risk based multiple-microbial criteria for *Listeria monocytogenes*, *Salmonella* spp and Shiga toxin-producing *E. coli* in raw milk soft cheese. Society of Risk Assessment Annual Meeting. San Francisco, California, 9-12 Decmeber 2013.
SANAA M., POISSON S., SCHAFFNER DW., NAUTA M. Bayesian framework for microbial transfer rates data statistical analysis. Society of Risk Assessment Annual Meeting. San Francisco, California, 9-12 Decmeber 2013.
5. **SANAA M.** Risk ranking: critical inventory of existing methodologies. Federal agency for the safety of the food chain. Scientific committee symposium on Risk ranking in the food chain. Brussels, 29 November 2013. Invited speaker.
6. **SANAA M.** Overview of microbial risk assessment models (in Arabic). Dubai International Food Safety Conference. 18-19 November 2013. Invited speaker.
7. **SANAA M.** Significance of STEC in cheese and tools for detection, growth and survival. World Dairy Summit, Cape Town, South Africa, 5-9 November 2012. Invited speaker
8. **SANAA M.** Risk assessment and management tools *E. coli* STEC, *Salmonella* and *Listeria monocytogenes* in soft raw milk cheeses. 7th Dubai International Food Safety Conference, 21-23 February, 2012. Invited speaker
9. **SANAA M.**, Poisson S, Lailier R. Risk based microbiological criteria for Shiga toxin-producing *E. coli* (STEC) in ground beef. SRA 2011 annual meeting. Charleston, NC, 4-7 December 2011.

10. **SANAA M.** conference on managing food safety in the dairy industry and the food chain on March 11 and 12, 2009. Ottawa, Canada. Invited speaker
11. **SANAA M.** Dairy Pasteurization in Today's Risk-Based Food Safety Environment — International Perspectives on the Use of Risk Assessment Tools - IAFP annual meeting. Columbus August 3-6, 2008. Invited speaker
12. **SANAA M.** Food safety objectives – example of *Listeria monocytogenes* in soft cheeses made from raw milk. IDF/FAO Symposium on Revolution in Food Safety Management, 13-15 February 2008, Bali, Indonesia. Invited speaker
13. **SANAA M.** How to Translate the Appropriate Level of Protection to Food Safety Objectives? ISVEE XI. Theme 7 - Food Safety and Other Zoonotic Disease Issues. Cairns 6-11 August 2006.
14. **SANAA M.** Risk assessment of *Listeria monocytogenes* in soft cheeses. ISVEE XI. Theme 7 - Food Safety and Other Zoonotic Disease Issues. Cairns 6-11 August 2006.
15. **SANAA M.** Efficacy of preventive measures and hurdle technology by quantitative risk assessment. IDF World dairy summit 20-23 October-2006, Shanghai. Invited speaker
16. **SANAA M.** Use of epidemiological data to assess the dose response model. 2nd International Conference on Microbial Risk Assessment. Sydney 20 - 23 Feb, 2006.
17. **SANAA M.** Use of risk assessment models to derive at Food Safety Objectives; *Listeria monocytogenes* in soft cheeses as an example. SRA 2005 Annual Meeting. December 4-7, 2005 — Orlando, Florida
18. **SANAA M.** Quantitative risk assessment related to microbial food contamination. 27th World Veterinary Congress - Tunis, September 25-29, 2002
19. **SANAA M.** Problems of low prevalence of severe microbial hazards. Congrilaït 2002, 26th IDF World Dairy Congress. Paris, France September 24 - 27, 2002. Invited speaker.
20. **SANAA M, BEMRAH N, CERF O.** COST action 920. Foodborne zoonosis: a coordinated foodchain approach. Working group 3: quantitative risk assessment. Exposure assessment of zoonotic foodborne pathogens. Bilthoven, the Netherlands 7-8- Mars 2002. *Listeria monocytogenes* in cheese products: the French experience. Invited speaker
21. **SANAA M.** Comment déclarer un pays ou une région indemne. Symposium de l'Association d'Epidémiologie et de Santé Animale (Liège 16 mars 2001). Invited speaker
22. **SANAA, M. et O. CERF.** 2001. Risk assessment of Listeriosis associated with RTE food: Available dose response models and their use in Risk Characterization Society of Risk Analysis – Europe: Lisbon 23-26 Mai 2001.
23. **SANAA M.** Les données existantes en France sont-elles suffisantes du point de vue de l'analyse quantitative des risques infectieux d'origine alimentaire ? Deuxième Colloque de la revue d'Epidémiologie et de Santé Publique 23 novembre 2001. Invited speaker.
24. **SANAA M.** Use of detectable prevalence and acceptable prevalence concepts to declare a region or country as 'disease – free. ISVEE 9 symposium, Breckenridge, Colorado 2000.
25. **BEMRAH N, SANAA M, BERGIS H, BEAUFORT A, DUFOUR B.** Quantitative risk assessment of human salmonellosis from the consumption of a turkey product in collective restaurants. ISVEE 9 symposium, Breckenridge, Colorado 2000.
26. **LORINO T, SANAA M.** Statistical analysis for correlated failure time data. ISVEE 9 symposium, Breckenridge, Colorado 2000.
27. **SANAA M. and MOHAMMED HO.** Risk analysis: an epidemiological approach. ISVEE 9 symposium, Breckenridge, Colorado 2000.
28. **SANAA (M), BEMRAH (N), MEYER (S), CERF(O) et MOHAMMED (HO).** Quantification des risques pour la santé liés aux contaminations microbiologiques des aliments. Colloque « épidémiologie, environnement et santé. Saint-Malo 25-26-27 octobre 1999. Invited speaker
29. **CASSIN, M.H., CERF, O., SANAA, M., LAMMERDING, A.M.** 1998. Quantitative risk assessment modelling: example of raw milk cheese. In: International Dairy Congress, Aarhus (Denmark)
30. **LE POTIER M.F., FOURNIER A., HOUDAYER C., HUTET E., AUVIGNE V., HERY D., SANAA M. et TOMA B.** Utilisation d'extraits musculaires pour la détection des anticorps anti-gE du virus de la maladie d'Aujeszky. Journées rech. Porcine en France 1998 (CR, 1998, **30**, 399-403).
31. **SANAA (M), MOHAMMED (H), CERF (O).** Risk analysis: an epidemiologic perspective. Annual conference Soc. for risk analysis-Europe, 11-14 oct. 1998.
32. **MOHAMMED (H), WADE (S), BARWICK (R), SANAA (M), SCHAFT (S).** Epidemiologic risk assessment of *Cryptosporidium parvum* in watershed. Annual conference Soc. for risk analysis-Europe, 11-14 oct. 1998.

33. TOMA (B), DUFOUR (B), BONJOUR (P), **SANAA** (M), ANGOT (JL). A method for incorporating the evaluation of a veterinary services and surveillance programmes in animal health risk assessments. Annual conference Soc. for risk analysis-Europe, 11-14 oct. 1998.
34. BEMRAH (N) et **SANAA** (M). Quantitative Risk Assessment for *Listeria monocytogenes* contamination of bovine milk. VIIIth ISVEE Symposium, Paris, 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 06.14.1-3)
35. BEMRAH (N) et **SANAA** (M). Quantitative Risk Assessment for *Listeria monocytogenes* contamination of bovine milk. VIIIth ISVEE Symposium, Paris, 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 06.14.1-3)
36. BEMRAH (N), MEYER (S), CERF (O), CASSIN (MH), GRIFFIHS (MW), MOHAMMED (H), **SANAA** (M). Quantitative risk assessment of human listeriosis from consumption of soft cheese made from raw milk. Annual conference Soc. for risk analysis-Europe, 11-14 oct. 1998.
37. BEMRAH (N), MOURON (D), DESIRE (G), LAMARQUE (F) et **SANAA** (M). Enquête sur la mortalité extrasynégétique du grand gibier sauvage dans 25 départements français en 1993 et 1994. VIIIth ISVEE Symposium, Paris, 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 01.12.1-3).
38. BENDALI (F), BICHET (H), SCHELCHER (F) and **SANAA** (M). Factors associated with diarrhea incidence in beef calves from birth to 30 days of life in the french Midi-Pyrénées region. VIIIth ISVEE Symposium, Paris, 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 05.10.1-3)
39. BENDALI (F), **SANAA** (M), LEROY (I), MTAALLAH (B) and MIALOT (JP). Economic effect of subclinical mastitis control in dairy cattle: observational study in french dairy herds. VIIIth ISVEE Symposium, Paris, 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 10.05.1-3)
40. CERF (O), CASSIN (MH), **SANAA** (M) and GRIFFITHS (MW). Risk assessment of *Listeria monocytogenes* in Camembert cheese made from raw milk. Symposium on risk analysis, Guelph, June 4th.
41. **SANAA** (M), CERF (O), GRIFFITHS (MW), et CASSIN (MH). Appréciation des risques de maladies infectieuses transmises par les aliments. In « 5èmes journées Agro-Industrie et méthodes statistiques », Versailles, 3-5 décembre 1997. Invited speaker
42. HAMMAMI (S), **SANAA** (M), SEGHAIER (C), MACKAY (DKJ), AOUINA (T) et TLATLI (A). Evaluation of the vaccination campaign against foot and mouth disease in the ovine population in Tunisia. VIIIth ISVEE Symposium, Paris, 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 08.02.1-3)
43. LESCOAT (Ph), POUILLOT (R), **SANAA** (M), REPIQUET (D), GERBIER (G), BENET (JJ) et GARIN-BASTUJI (B). Serological patterns of false positive reactions in bovine brucellosis in Saône et Loire (poster). VIIIth ISVEE Symposium, Paris 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 12.C.38).
44. PONSART (C), DELETANG (F), **SANAA** (M), GIPOULOU (C), BIHOREAU (JL), ROUX (ME) and MIALOT (JP). Synchronisation treatment and reproduction management influence pregnancy rate and AI to calving interval in french beef cows. VIIIth ISVEE Symposium, Paris, 8-11 juillet 1997 (poster) (Epidémiol. Santé Anim., 1997, 31-32, 05.B 21).
45. POUILLOT (R), LESCOAT (Ph), GARIN-BASTUJI (B), REPIQUET (D), TERRIER (P), GERBIER (G), BENET (JJ) and **SANAA** (M). Retrospective epidemiological survey on false positive reactions in bovine brucellosis in Saône et Loire (France). VIIIth ISVEE Symposium, Paris 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 08.03.1-3).
46. PUYALTO (C), **SANAA** (M), N'DJOYA (A) et PLANCHENAU (D). Factors influencing daily weight gain on young zebu in Garona district, Cameroon. VIIIth ISVEE Symposium, Paris, 8-11 juillet 1997 (Epidémiol. Santé Anim., 1997, 31-32, 02.03. 1-3).
47. **SANAA** (M), AUDURIER (A), POUTREL (B), MENARD (JL) et SERIEYS (F). Origine of bovine raw milk contamination by *Listeria monocytogenes*. International Dairy Federation. Symp. on Bacteriological quality of rax milk 13, 14, 15 March 1996, Wolfpassing, Austria. (Proceed. p. 85-89).