Jakob Zinsstag graduated with a doctorate in veterinary medicine (Dr. med. vet.) on Salmonella diagnosis at the Veterinary Faculty of the University of Berne in 1986. After his studies he worked in rural practice and as post doctoral fellow on trypanosomiasis research at the Swiss Tropical Institute. From 1990 to end of 1993 he led a livestock helminthosis project for the University of Berne at the International Trypanotolerance Centre in The Gambia. From 1994 to 1998 he directed the Centre Suisse de Recherches Scientifiques in Abidjan, Côte d’Ivoire. Since 1998 he leads the Human and Animal Health research unit at the Swiss Tropical and Public Health Institute (Swiss TPH) in Basel with a focus on health of nomadic people and control of zoonoses in developing countries under the paradigm of “one medicine”. He holds a PhD in Tropical Animal Production from the Prince Leopold Institute of Tropical Medicine of Antwerp, Belgium. Since 2010 he is Professor of Epidemiology at the University of Basel. He is a diplomate of the European College of Veterinary Public Health (ECVPH) and member of the scientific advisory board of the Prince Leopold Institute of Tropical Medicine of Antwerp, Belgium.

Until he returned from eight years living in Africa, the main areas of research were the epidemiology of intestinal parasites and animal production in the tropics. Upon returning to the SwissTPH, and building on the "one medicine" concept developed by Calvin Schwabe, the research group focused on the health care of pastoral nomads and the eradication of zoonoses in developing countries. The scientific accomplishments of the research group include: Validation of the “one medicine – one health” concept by (1) parallel assessment of the health status of animals and humans as well as combined human and animal health vaccination services for pastoral nomads in the Sahel; (2) development of the first mathematical model for animal-human brucellosis transmission, and its application in Mongolia; (3) the first molecular characterisation of tuberculosis in livestock and humans in Chad; (4) demonstration of the feasibility and cost-effectiveness of vaccination campaigns for dogs for the elimination of rabies in African cities. Currently the potential of “one health” is also being examined for Switzerland.

The research group is currently part of the National Centre of Competence in Research North-South (www.nccr-north-south.unibe.ch, financed by the SNSF and the Swiss Agency for Development and Cooperation). Within the NCCR N-S, Jakob Zinsstag is co-leader of health research, to which research institutions throughout Switzerland contribute and which has projects based on four continents. The group's projects are located in Chad, Mali, Mauritania, Ethiopia, Tanzania, Kyrgyzstan and Mongolia and the group is networking with research institutes and veterinary authorities in these countries and England, France, Germany, Austria, Canada and the USA.