Abbey Olsen Tenure track Assistant professor Animal Welfare and Disease Control **Postal address:** Grønnegårdsvej 8 1870 Frederiksberg C

**Email:** abol@sund.ku.dk **Phone:** +45 35 33 56 75



### Short presentation

Abbey Olsen is a tenure-track Assistant Professor in the Veterinary Epidemiology and Risk Assessment group at the Department of Veterinary and Animal Sciences, University of Copenhagen, Denmark. She completed her training in quantitative veterinary epidemiology at Wageningen University and Research Center, the Netherlands, in 2014, and earned her PhD in Veterinary Epidemiology in 2021. In her PhD study, she focused on the seroepidemiology of the *Toxoplasma gondii* parasite in the Danish pig population, evaluating diagnostic tests for detecting *T. gondii* antibodies in pigs, and quantifying the risk of human toxoplasmosis in Denmark.

Following her PhD, she joined the National Food Institute in 2022, contributing to the European Food Safety Authority's (EFSA) Scientific Network on Zoonoses Data Collection, One Health Zoonoses reports, and the Annual Zoonoses Report of Denmark. She then advanced her career as a post-doctoral researcher, working on projects evaluating surveillance systems for *Campylobacter* and *Salmonella* in poultry within Denmark.

In mid-2023, Abbey Olsen joined the Danish Veterinary Consortium (DK-VET) as part of her role as a tenure-track Assistant Professor. At DK-VET, she specializes in conducting risk assessments within veterinary contingency, supporting consortium's goal of improving animal health and disease prevention. She also co-supervises PhD and MSc students and conducts research focusing on the risk of bias assessment in studies, biosecurity assessment of farms, systematic reviews, and diagnostic test evaluations.

### Short presentation

Abbey Olsen is a tenure-track Assistant Professor in the Veterinary Epidemiology and Risk Assessment group at the Department of Veterinary and Animal Sciences, University of Copenhagen, Denmark. She completed her training in quantitative veterinary epidemiology at Wageningen University and Research Center, the Netherlands, in 2014, and earned her PhD in Veterinary Epidemiology in 2021. In her PhD study, she focused on the seroepidemiology of the *Toxoplasma gondii* parasite in the Danish pig population, evaluating diagnostic tests for detecting *T. gondii* antibodies in pigs, and quantifying the risk of human toxoplasmosis in Denmark.

Following her PhD, she joined the National Food Institute in 2022, contributing to the European Food Safety Authority's (EFSA) Scientific Network on Zoonoses Data Collection, One Health Zoonoses reports, and the Annual Zoonoses Report of Denmark. She then advanced her career as a post-doctoral researcher, working on projects evaluating surveillance systems for *Campylobacter* and *Salmonella* in poultry within Denmark.

In mid-2023, Abbey Olsen joined the Danish Veterinary Consortium (DK-VET) as part of her role as a tenure-track Assistant Professor. At DK-VET, she specializes in conducting risk assessments within veterinary contingency, supporting consortium's goal of improving animal health and disease prevention. She also co-supervises PhD and MSc students and conducts research focusing on the risk of bias assessment in studies, biosecurity assessment of farms, systematic reviews, and diagnostic test evaluations.

#### Research outputs

#### A comparison of European surveillance programs for Campylobacter in broilers

Olsen, Abbey, Bonardi, S., Barco, L., Sandberg, M., Langkabel, N., Roasto, M., Majewski, M., Brugger, B., H. Kautto, A., Blagojevic, B., B. Cota, J., Nagel-Alne, G. E., Huneau, A., Laukkanen-Ninios, R., Lebouquin-Leneveu, S., Alvseike, O., Fredriksson-Ahomaa, M., Vieira-Pinto, M. & Kaukonen, E., 2024, In: Food Control. 155, 110059.

## Quantifying human toxoplasmosis risk from pork consumption in Denmark : A conceptual framework for tissue cyst-based analysis

Olsen, Abbey, Swart, A., Pires, S. M., Fagt, S., Møgelmose, V., Houe, Hans, Denwood, Matt, Nielsen, H. V. & Alban, L. M., 2024, *Vergne, T. and Robinson, P.A. (eds). Proceedings of the Society for Veterinary Epidemiology and Preventive Medicine annual meeting held in Uppsala, Sweden, SVEPM.* 

Toxoplasma gondii seroprevalence in reindeer (Rangifer tarandus tarandus L.) in northern Sweden : a cross-sectional study from 2014

Kautto, A. H., Olsen, Abbey, Wallander, C. & Vågsholm, I., 2023, In: Acta Veterinaria Scandinavica. 65, 9 p., 53.

#### A One Health status on surveillance, outbreak investigation and action plans for Campylobacter in Denmark

Kahl Petersen, C., Sandø, G., Sandberg, M., Foddai, A., Olsen, Abbey, Müller, L., Benedetti, G. & Grimstrup Joensen, K., 2023, *Annual Report on Zoonoses in Denmark 2022.* Technical University of Denmark, p. 20-24 (Annual Report on Zoonoses in Denmark).

#### Annual report on Zoonoses in Denmark 2022

Lassen, B. (ed.), Olsen, Abbey (ed.) & Sandberg, M. (ed.), 2023, Technical University of Denmark. 68 p. (Annual Report on Zoonoses in Denmark).

### Modeling the Risk of Human Toxoplasmosis in the Danish Population From Ingestion of Tissue Cysts Present in Pork Products

Olsen, Abbey, Swart, A., Pires, S. M., Fagt, S., Houe, Hans, Denwood, Matt, Møgelmose, V., Nielsen, H. V. & Alban, L. M., 2023, 14th International Symposium on the Epidemiology and Control of Biological, Chemical and Physical Hazards in Pigs and Pork: Proceedings. Iowa State University Digital Press, 4 p.

#### Trends and sources in human salmonellosis

L. Brinch, M., Sandberg, M., Njage, P. M. K., Olsen, Abbey & Litrup, E., 2023, *Annual Report on Zoonoses in Denmark 2022*. Lassen, B., Olsen, A., Sandberg, M., Müller, L., Torpdahl, M. & Petersen, C. K. (eds.). DTU Food, 4 p.

#### **Annual Zoonoses Report 2021**

Olsen, Abbey, Sandberg, M. & Borck Høg, B., 2022

## Determination of an optimal ELISA cut-off for the diagnosis of Toxoplasma gondii infection in pigs using Bayesian latent class modelling of data from multiple diagnostic tests

Olsen, Abbey , Nielsen, H. V., Alban, L., Houe, Hans, Jensen, T. B. & Denwood, Matt, 2022, In: Preventive Veterinary Medicine. 201, 105606.

#### Estimating the true seroprevalence of Toxoplasma gondii in Danish pigs

Olsen, Abbey, Sandberg, M., Houe, Hans, Nielsen, H. V., Denwood, Matt & Alban, L. M., 2022, *16th International Symposium of Veterinary Epidemiology and Economics: Connecting Animals, People, and their shared environments - Abstract book.* p. 453 1 p. 36

# PREPAREDNESS FOR POTENTIAL FUTURE SEROLOGICAL SURVEILLANCE OF TOXOPLASMA GONDII IN THE DANISH PIG POPULATION: A REVIEW OF LATEST EPIDEMIOLOGICAL STUDIES FROM DENMARK

Olsen, Abbey, Houe, Hans, Nielsen, H. V., Denwood, Matt, Sandberg, M., Pires, S. M. & Alban, L. M., 2022, p. 173-176.

#### A longitudinal study of Toxoplasma gondii seroconversion on four large Danish sow farms

Olsen, Abbey , Alban, L., Denwood, Matt, Houe, Hans, Birk Jensen, T. & Vedel Nielsen, H., 2021, In: Veterinary Parasitology. 295, 9 p., 109460.

Seroepidemiology of Toxoplasma gondii in Danish pigs & the zoonotic potential from pork consumed in Denmark Olsen, Abbey , 2021, 212 p.

## Seroprevalence of *Toxoplasma gondii* infection in sows and finishers from conventional and organic herds in Denmark: implications for potential future serological surveillance

Olsen, Abbey, Sandberg, M., Houe, Hans, Nielsen, H. V., Denwood, Matt, Jensen, T. B. & Alban, L., 2020, In: Preventive Veterinary Medicine. 185, 10 p., 105149.

# Seroprevalence of *Toxoplasma gondii* in domestic pigs, sheep, cattle, wild boars, and moose in the Nordic-Baltic region: A systematic review and meta-analysis

Olsen, Abbey, Berg, R. P. K. D., Tagel, M., Must, K., Deksne, G., Enemark, H. L., Alban, L., Johansen, M. V., Nielsen, H. V., Sandberg, M., Lundén, A., Stensvold, C. R., Pires, S. M. & Jokelainen, P., May 2019, In: Parasite Epidemiology and Control. 5, p. 1-13 e00100.

# Seroprevalence of Toxoplasma gondii in domestic pigs, sheep, cattle, moose and wild boars in the Nordic-Baltic region: Methodological considerations

Olsen, Abbey, Berg, R., Must, K., Deksne, G., Enemark, H. L., Johansen, M. V., Nielsen, H. V., Sandberg, M., Lundén, A., Stensvold, C. R., Pires, S. M., Jokelainen, P., Houe, Hans & Alban, L. M., 2019. 1 p.

### Prevalence, risk factors and spatial analysis of liver fluke infections in Danish cattle herds

Olsen, Abbey , Frankena, K., Bødker, René, Toft, N., Thamsborg, Stig Milan, Enemark, H. L. & Halasa, T. H., 2015, In: Parasites & Vectors. 8, 10 p., 160.