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# Detection of a novel serotype of Actinobacillus pleuropneumoniae in a Swedish wild boar

## BACKGROUND & AIM

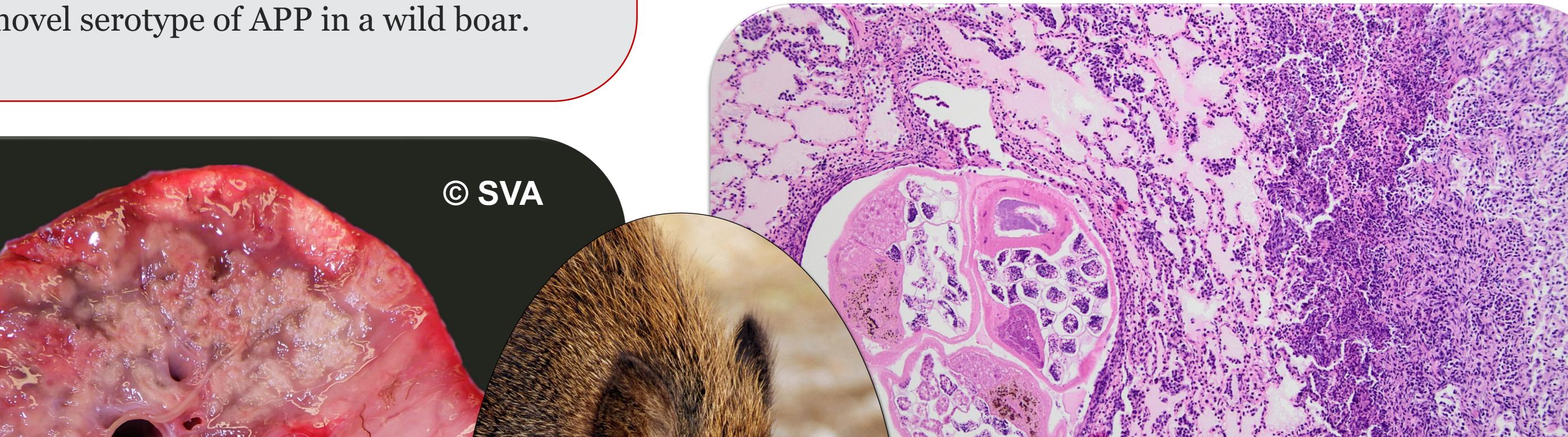
• Actinobacillus pleuropneumoniae (APP) is a common cause of respiratory disease in domestic pigs worldwide and has also been detected in wild boars. Serotype 2 is the most common serotype in domestic pigs in Sweden but information on APP in Swedish wild boars is lacking.

## RESULTS

- Severe multifocal pleuropneumonia detected at necropsy
- Heavy load of lung worms

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- The aim was to describe the detection of a to Sweden novel serotype of APP in a wild boar.
- Culture positive for APP
- Serotype 7 determined by agglutination
- WGS and analysis of PCR primer sites confirmed a serotype 7



Cut section of the lung with sharply demarcated multifocal dry, necrotic areas. Bronchial lumen filled with lung nematodes.

## MATERIAL & METHODS

- Emaciated (9.7 kg) young female wild boar found dead in the south of Sweden.
- Submitted for necropsy to the National Veterinary Institute within the wildlife surveillance program.
- Lung tissue sample collected for bacterial culturing.
  Species identification by MALDI-TOF MS.
  Serotype determined by agglutination using rabbit antisera.
  Whole-genome sequencing (WGS) used for serotype verification.

To the right is a severe suppurative bronchopneumonia with extensive necrosis. To the left are transversal sections of 3 lung worms. H&E, 100x.

## **DISCUSSION & CONCLUSION**

- First time APP serotype 7 was detected from pigs in Sweden unknown transmission route.
- Highlights the importance of biosecurity in preventing disease transmission from wild boars to domestic pigs.
- Underlines the need for wildlife disease

surveillance for new and emerging diseases. Continued surveillance is required to determine how widespread APP is and which serotypes are present.





### Scan code for contact details for Associate Professor Marie Sjölund



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