

Cell Research press release

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[A dog's tale: Migration around the world *IMAGES*](#)

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An immune-competent mouse model to study Hepatitis C is reported in *Cell Research* this week. It is hoped that this model may open a new venue to study the mechanisms of chronic hepatitis C and develop better treatments.

The migratory history of the domestic dog is presented in *Cell Research* this week. The study details the spread of dogs around the world from their origins in south-east Asia.

Ya-Ping Zhang, Peter Savolainen and colleagues sequenced the genomes of 58 members of the dog family, including grey wolves, indigenous dogs from south-east and north-east Asia, village dogs from Nigeria, and a collection of breeds from the rest of the world, such as the Afghan Hound and Siberian Husky. Based on their genetic analysis, the authors found that dogs from south-east Asia had a higher degree of genetic diversity than the others analysed, and were most closely related to grey wolves. They suggest that the domestic dog may have originated in south-east Asia, approximately 33,000 years ago.

The authors conclude that around 15,000 years ago, a subset of dog ancestors started to migrate towards the Middle East and Africa, reaching Europe approximately 10,000 years ago. Although the authors believe that this dispersal was associated with the movement of humans, the first migration of the domestic dog out of south-east Asia may have been self-initiated. This may have been owing to environmental factors, such as the retreat of glaciers, which started approximately 19,000 years ago.

Dogs from one of these groups then travelled back towards northern China, where they encountered Asian dogs that had migrated from south-east Asia. These two groups interbred, before spreading to the Americas.

Article Details

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