

## **Interview with Xavier Montagutelli**

00'05" I am Xavier Montagutelli, I am a veterinary doctor.

00'07" I am in charge of the animal facilities at the Pasteur Institute.

00'09" I am also a genetics researcher.

00'11" "What do your everyday tasks involve?"

00'14" My mission, on a daily basis, is to do everything possible to ensure that the research teams at the Pasteur Institute

00'19" can carry out their projects that use animals.

00'22" This also involves ensuring animal well-being.

00'25" I advise the scientists

00'26" so that the methods they use

00'28" obtain the most relevant results for humans

00'31" and at the same time maintaining maximum animal welfare.

00'34" Nearly 99% of all animals used at the Pasteur Institute are mice.

00'39" "How would you define the concept of 'animal model' ?"

00'42" Animal models are mainly used to simplify

00'43" complex situations that may be encountered in humans.

00'47" When a drug is tested in an animal,

00'50" it is tested on a species of animal,

00'53" often on a single animal line, so the animals are very homogeneous.

00'58" When a drug is tested in humans,

01'00" it is tested on a large population with a high genetic diversity.

01'04" We cannot imagine extrapolating directly,

01'08" and without risks of errors, data obtained from one animal for the entire human population.

01'14" You have to test a drug on several animals –

01'17" animals that are genetically different,

01'20" just like we are genetically different, if we want to raise the relevance of the results.

01'24" "In Europe, how are laboratory animals protected?"

01'27" 'Animal welfare is a European value',

01'31" declare the Amsterdam treaty and the new European Directive that governs animal research since 2010.

01'37" In this European directive,

01'40" the focus is on the protection of animals used for experimental purposes,

01'43" scientific purposes -

01'45" It is even the title of the Directive -

01'47" and this protection relies especially on the fact that any research that uses animals

01'54" is subjected to an approval by an administrative authority –

01'57" in France that is the Ministry responsible for research.

02'00" This authorization is the result of an ethical evaluation.

02'03" This ethical assessment must make sure 3 criteria are met.

02'08" The first concerns the necessary use of animals to achieve the project's objectives.

02'14" If these goals can be achieved without the use of animals, it is forbidden to use animals.

02'20" The 2<sup>nd</sup> criterion is to minimize the number of animals used in the project

02'26" and choosing the species that is least likely to feel pain, stress or discomfort.

02'35" This species must nevertheless be relevant to the objectives for the species for which the study is undergone -

02'40" Relevant to humans if it is a XX study.

02'43" And the 3<sup>rd</sup> criterion is to implement experimental methods

02'47" methods that will ensure minimal impact on the welfare of the animals in the studies.

02'53" This is possible especially thanks to anaesthesia, to analgesia.

02'57" On top of all that, the European Directive has implemented,

03'00" and this is a major novelty,

03'02" an organization, called structure in charge of animal welfare,

03'05" whose mission is to constantly monitor – from birth, until the very end –

03'11" the health and well-being of the animals,

03'13" to intervene as soon as the animal welfare is compromised,

03'16" to advise researchers

03'19" on the best experimental methods to use

03'23" use in order to maintain animal welfare.

03'25" This European regulation

03'27" is in place in the whole of France, and is of course fully instated at the Pasteur Institute.

03'32" "Today, what are the challenges of animal research?"

03'35" The first challenge is to improve project design, the design of experimental procedures,

03'42" , in order to maximise the relevance of the results found in animals

03'46" to fit the species for which the study is meant for,

03'49" most often humans.

03'51" The 2<sup>nd</sup> objective

03'53" is to work relentlessly, in order to minimize the impact

03'58" of these experimental methods on animal welfare.

04'00" There are spectacular technological advances that have been made in the recent years

04'04" precisely to reduce the number of animals, or with the same number of animals get far more information,

04'09" far more results.

04'11" The 3<sup>rd</sup> challenge, I believe, is to relentlessly and non-stop

04'16" better explain what animal research is for,

04'20" how it works, to the public.

04'22" It needs to be explained to the media, our policy needs to be explained properly

04'26" to avoid the spread of misconceptions that hinder research, that hinder the progress

04'32" of knowledge and medicine.