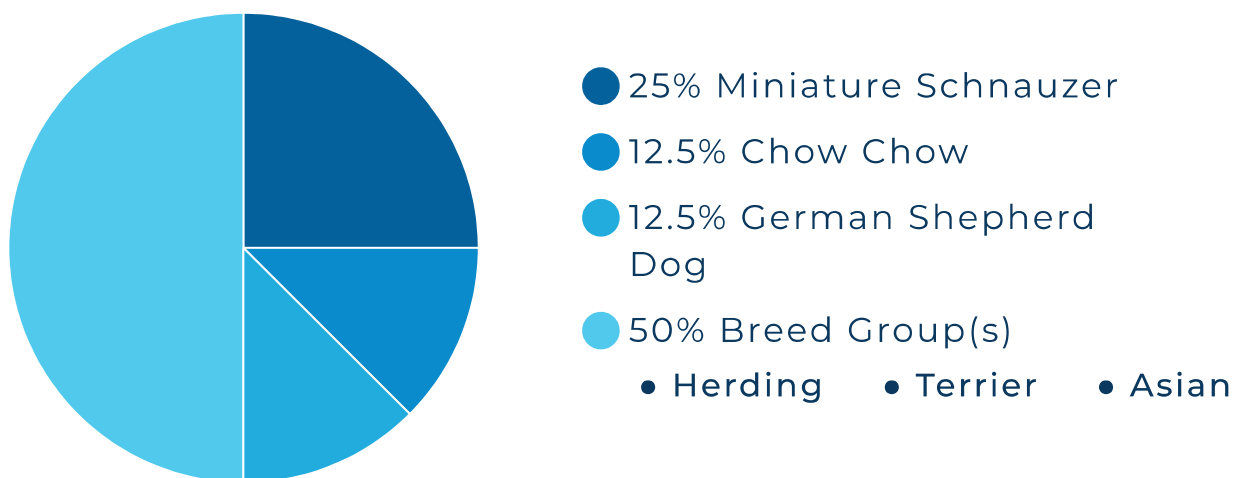


DISCOVER ALL  
**ABOUT MARIA**

The results are in! Let's take a look at what the DNA told  
us about Maria's ancestry...

## MARIA'S BREED BY PERCENTAGE



Exciting news, the results are in! Here's what makes Maria so unique. Using the data generated from Maria's DNA, our sophisticated computer algorithm performed over 17 million calculations! What you see here is Maria's ancestry by percentage.

# MINIATURE SCHNAUZER

## SPIRITED AND INTELLIGENT.

- Intelligent, active, and alert dogs. Good watch dogs.
- Quick learners with reward-based training and as such enjoy dog sports such as agility, tracking, earthdog trials, rally and competitive obedience.
- May engage in chasing and barking at wildlife and can be tenacious or difficult to disengage from an activity that has its attention.
- Tend to be suspicious of strangers; may require careful socialization to prevent or reduce defensive aggressive tendencies.

► **Height**  
**13 - 14 in**

► **Weight (show)**  
**9 - 16 lb**

► **Weight (pet)**  
**9 - 19 lb**



## DID YOU KNOW?

Spirited and intelligent, Miniature Schnauzers were bred primarily to hunt rats and other vermin but could also guard flocks (as long as they were small flocks). They were created by crossbreeding the Standard Schnauzer with smaller breeds like the Affenpinscher, Miniature Pinscher and the Poodle. Though they arguably first appeared on the scene in the mid-19th century, it wasn't until 1899 that the Miniature Schnauzer was considered its own distinct breed. They were brought to the United States in 1925 and recognized by the American Kennel Club a year later, in 1926. Following World War II, the Miniature Schnauzer's popularity soared and, at one time, they were the third most popular breed in America. For such a small dog, they continue to make a big impression today.

# CHOW CHOW

THESE NOBLE DOGS ARE ORIGINALLY FROM NORTHERN CHINA.

- Reputation as a loyal family dog.
- Reserved and wary with strangers.
- Independent spirit, but responds to reward-based obedience training.
- The Chow Chow was originally bred for various purposes including the guarding of people and/or property. Individual members of this breed will benefit from firm and dedicated training to temper this guarding tendency, and thus help to maintain safety as a household companion.

► **Height**  
**18 - 22 in**

► **Weight (show)**  
**40 - 65 lb**

► **Weight (pet)**  
**42 - 69 lb**



## DID YOU KNOW?

Aloof and loyal, these noble dogs are originally from northern China (though some have argued they migrated there from Mongolia and elsewhere). In their native land, they are called Songshi Quan, which means 'puffy-lion dog'. It is thought the breed first appeared 2,000 years ago. They were mainly used for hunting and guarding sacred temples from evil entities. The East India Company brought them to England in 1781 and Queen Victoria received one as a gift in 1865. During the 1880s, more and more Chow Chows were imported in large numbers. Today, these puffy lions are the pride of many an owner's home.

# GERMAN SHEPHERD DOG

INITIALLY BRED FOR HERDING, STRENGTH, INTELLIGENCE AND TEMPERAMENT.

- Personalities can vary from calm and watchful/observant to energetic.
- Enjoy participating in dog sports such as agility, tracking, flyball, and competitive obedience.
- Eager to learn and respond well to reward-based training.
- The German Shepherd Dog was originally bred for various purposes including the guarding of people and/or property. Individual members of this breed will benefit from firm and dedicated training to temper this guarding tendency, and thus help to maintain safety as a household companion.

► **Height**

**22 - 26 in**

► **Weight (show)**

**48 - 89 lb**

► **Weight (pet)**

**48 - 97 lb**



## DID YOU KNOW?

The German Shepherd has a really impressive résumé. Over the years, they've been guard dogs, guide dogs, search and rescue dogs, and much more. Though initially bred for herding, their strength, intelligence and temperament have made them invaluable in all kinds of roles. They were famously used as German police and military animals during both World Wars. During World War I, allied soldiers took notice of their skills and brought the breed back home – but it was really after the end of the Second World War that they became popular worldwide. Today, there're just as likely to be home dogs as they are military dogs. Either way, they'll always rank highly in our estimation.

# BREED GROUPS MARIA IS MOST LIKELY RELATED TO

We tested Maria's ancestry for specific pure breeds, going back three generations (or to the great-grandparents). Beyond this, today's technology can only identify down to the genetic "group" level (sporting, toy, guard, etc.). We know the breeds found in these groups and that Maria may share genetic similarities with many of them. We've arranged these in order, with the most likely starting at the top. The breeds displayed are examples of breeds in each specific group. The full list for each can be found on the breeds we analyzed, click on the link below.

## HERDING GROUP

The herding group is a diverse category. These highly intelligent breeds were developed to guard and control the movement of livestock.

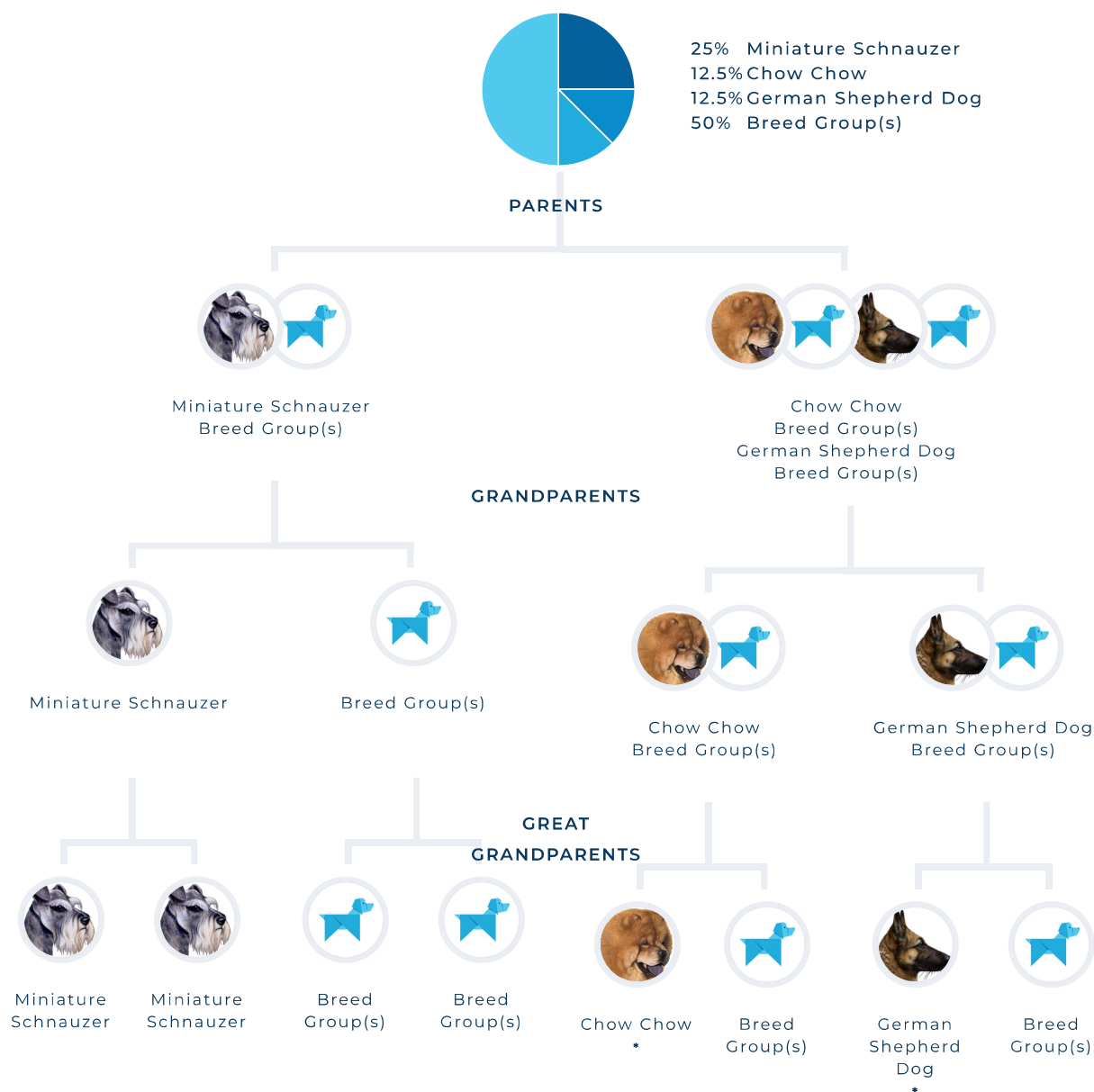
## TERRIER GROUP

The Terrier Group ancestors were bred to hunt and kill vermin. They are often characterized as feisty and energetic dogs whose sizes range from fairly small to much larger.

## ASIAN GROUP

The Asian Group is comprised mainly of breeds from the Asian and Arctic regions of the world. Often bred for guarding or working they have been invaluable assets to man throughout the ages.

# MARIA'S FAMILY TREE



\* This particular ancestor's breed has been detected, however at a lesser contribution. This suggests the breed is likely present further back in the ancestry.

# MARIA'S HEALTH RESULTS

We have tested Maria's DNA for the following important genetic health conditions.  
The results can be seen below.

## MULTIDRUG SENSITIVITY (MDR1)



**CLEAR**

Maria has no copies of the MDR1 mutation and should not be affected by the disorder due to this genetic cause.

## EXERCISE-INDUCED COLLAPSE (EIC)



**CLEAR**

Maria has no copies of the EIC mutation and should not be affected by the disorder due to this genetic cause.



# MARIA'S TRAITS

<b>Coat Color Main Possibilities</b>	Maria likely has a wolf-gray color coat, which could be banded with darker and lighter areas. This will be thanks to the 'agouti' gene, though the exact pattern of their coat will also be affected by other genes. Some dogs with this result also have tan markings in some areas. (If they do, congratulations by the way. This is seriously rare).
<b>Base Pigment Color</b>	Maria carries the gene for the 'expression' of black pigment. This means that even though their overall coat color may not be black, they are still able to make black pigment. They will also likely have black around their eyes, a black nose, and may even have black pads on their feet.
<b>Coat Length and Type</b>	Maria's coat is probably on the short side. The exact length of a dog's coat is down to several factors so it can vary. Did you know some genes can even change how a short coat looks, including adding 'feathering', which results in longer hairs behind the ears, under the belly, and behind the legs?
<b>Furnishings</b>	Maria carries the gene for 'furnishings', which means they are likely to have a fuzzy beard and eyebrows. This trait is commonly associated with terriers, but is carried by many other breeds as well, including the Poodle. It may also have come from many generations back in their ancestry.
<b>Tail Length</b>	Maria likely was born with a long tail - although the exact length can vary from dog to dog. Long tails are sometimes known as 'coffee table clearers'. (If you've ever seen a long-tailed dog get excited near one, you'll know exactly why.)
<b>Ear Carriage</b>	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Maria probably has perk or upright ears. Did you know this type of ear is recessive (which means you need a copy from each parent to show it)? Common breeds with upright ears include German Shepherd, Chihuahua and Husky.
<b>Leg Length</b>	Maria's legs should be relatively long in length, based on this marker (though there can be other genes that affect leg length). Did you know different dogs can have different leg lengths even if they are the same breed?

## IDEAL WEIGHT

Based on our findings, we've calculated that Maria's ideal, adult weight should be:

**24 lbs - 42 lbs**

Maintaining a healthy weight is a key factor in Maria having a long and healthy life.

# WISDOM<sup>TM</sup> PANEL



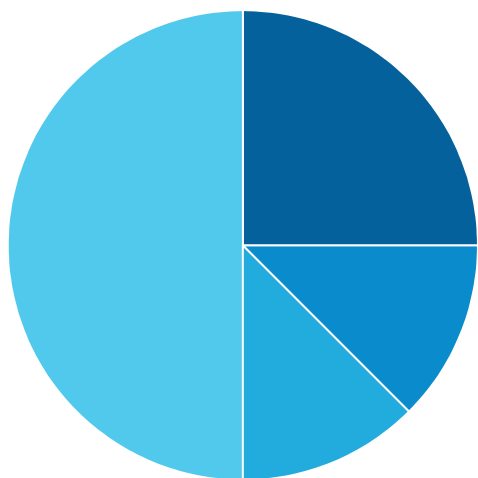
## STATEMENT OF AUTHENTICATION

Owner's Name: **Rod Allrich**

Dog's Name: **Maria**

Date: **December 8, 2018**

This certifies the authenticity of Maria's canine genetic background as determined, following the careful analysis of more than 1800 genetic markers, by the WISDOM PANEL™ Canine DNA Test. The purebred breed signature matches included in the analysis are those that were detected in the last three generations of Maria's ancestry using the Wisdom Health proprietary breed detection algorithm.



- 25% Miniature Schnauzer
- 12.5% Chow Chow
- 12.5% German Shepherd Dog
- 50% Breed Group(s)