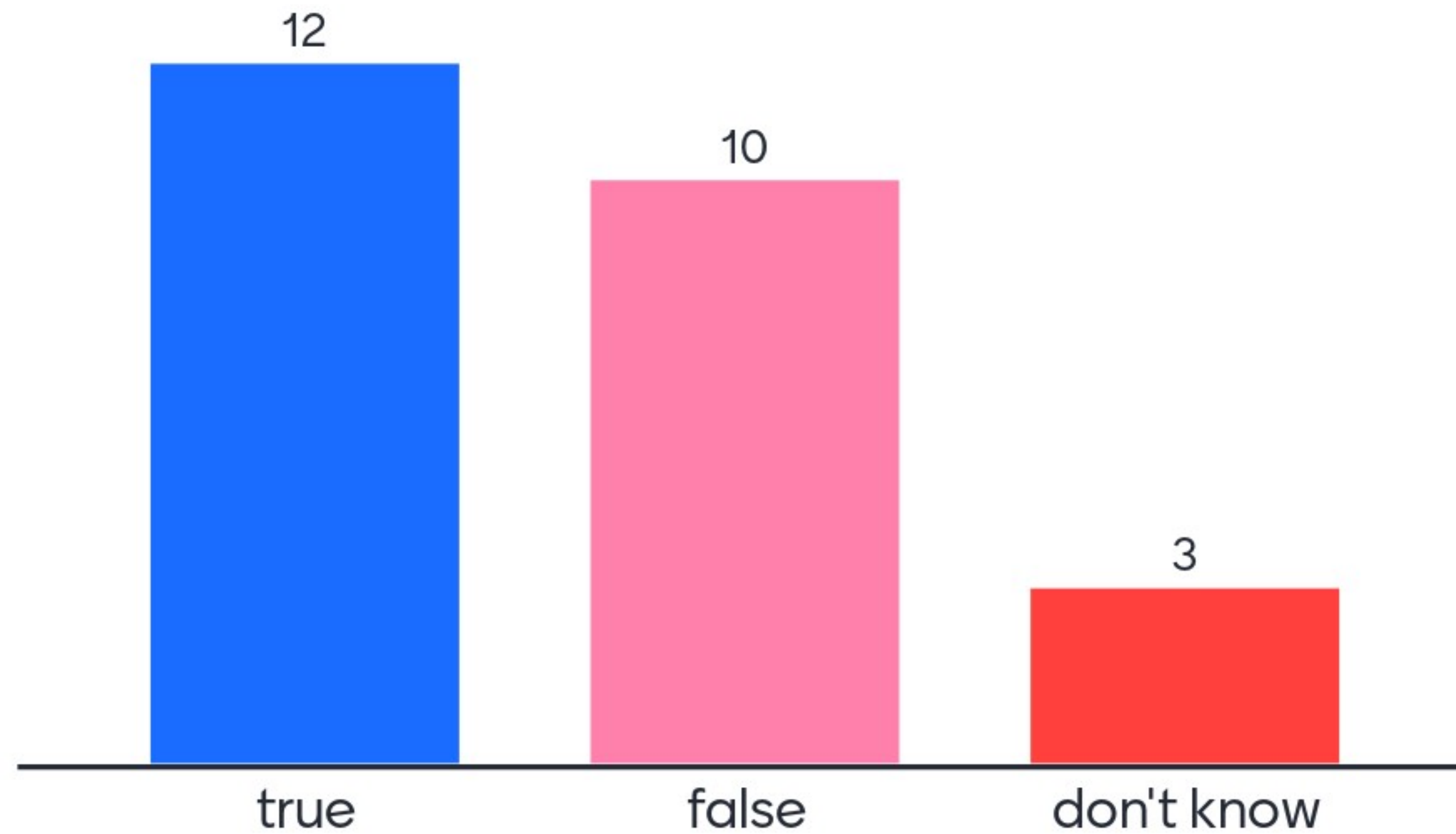


# Genebanks can no longer function without using genomics



# In relation to genomics the biggest difference between plant and animal genebanks is

Complexity

No cloning in animals

genetic diversity within sample

Genotype by environment interaction

Efforts

Genome size

Approach

Time

Genome size

# In relation to genomics the biggest difference between plant and animal genebanks is

Size

Generation characteristics

Plants can be genetically more uniform (self pollination)

Size

Ease of storage

Storage

Offspring different than parents in animals

Storage

Plant breeding starts from scratch,, animals don't.

# In relation to genomics the biggest difference between plant and animal genebanks is

Genome complexity

Selfing only in plants

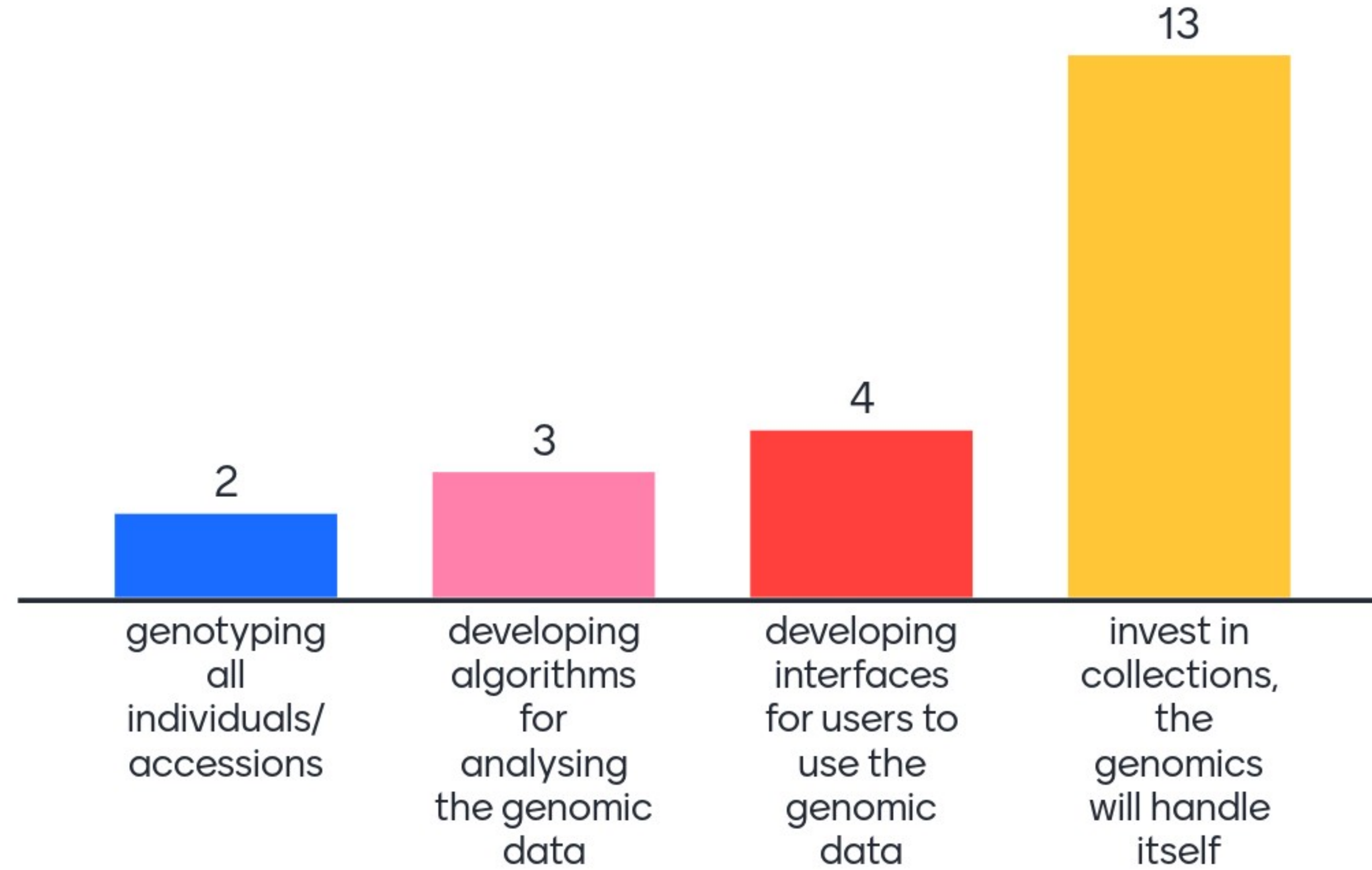
Polyploidy

users

Various ethical issues

The wild ancestors are extinct for most animal species

# Genebanks need to invest much more in



# If money is no issue, I would invest it in developing:

Sequencing

Standard for data exchange

Collections

massive gene editing

Accessible digital genebank

Collection missions

Collecting phenotypes with genotype

Massive Genotyping

Sequencing sampled in a same database

# If money is no issue, I would invest it in developing:

New sequencing techniques

Relation geno phenotype

Genotyping

Interface to share the data

Phenotyping

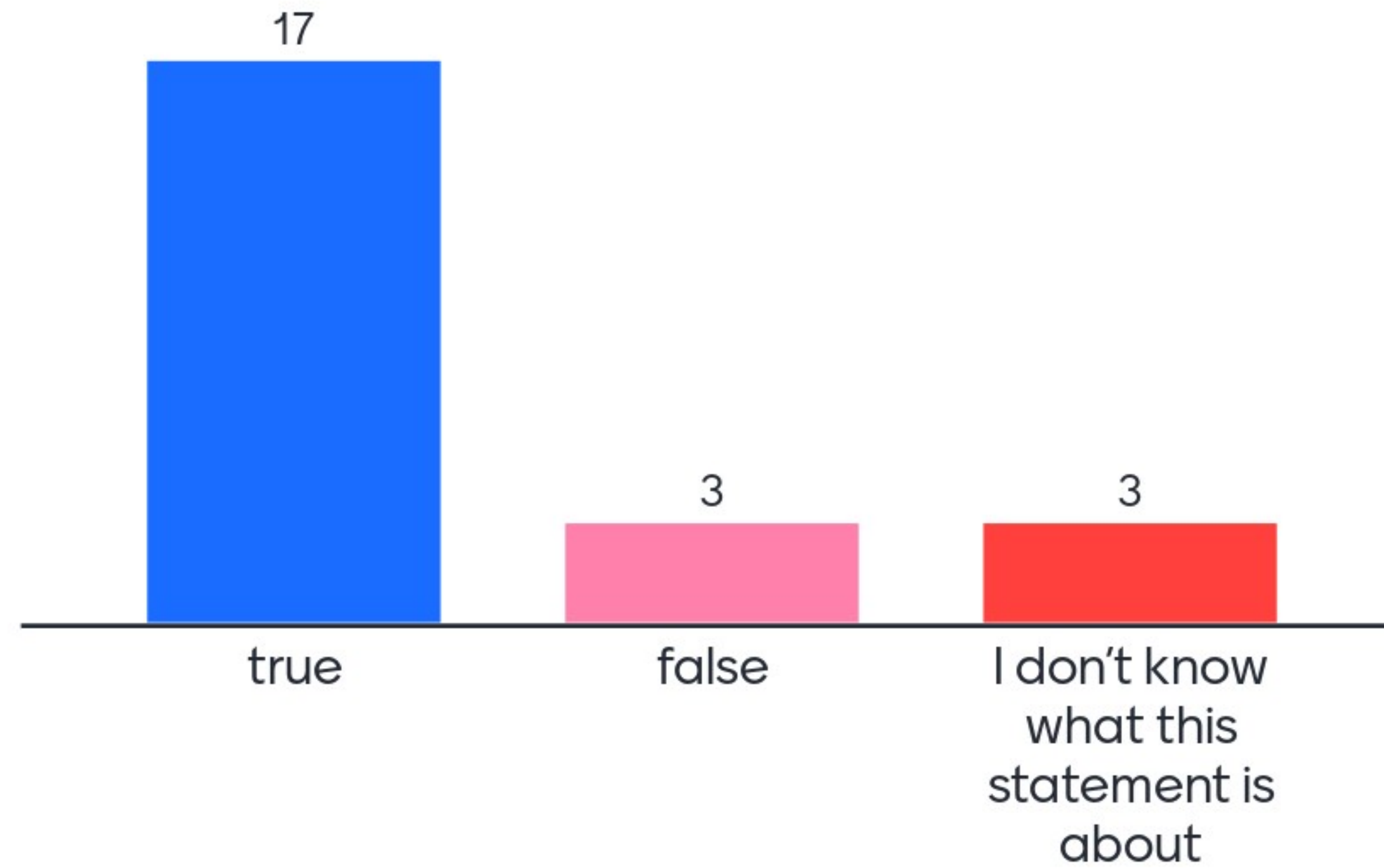
Invest in Bioinformatics

Literacy / Education

Genotype/Phenotype mapping

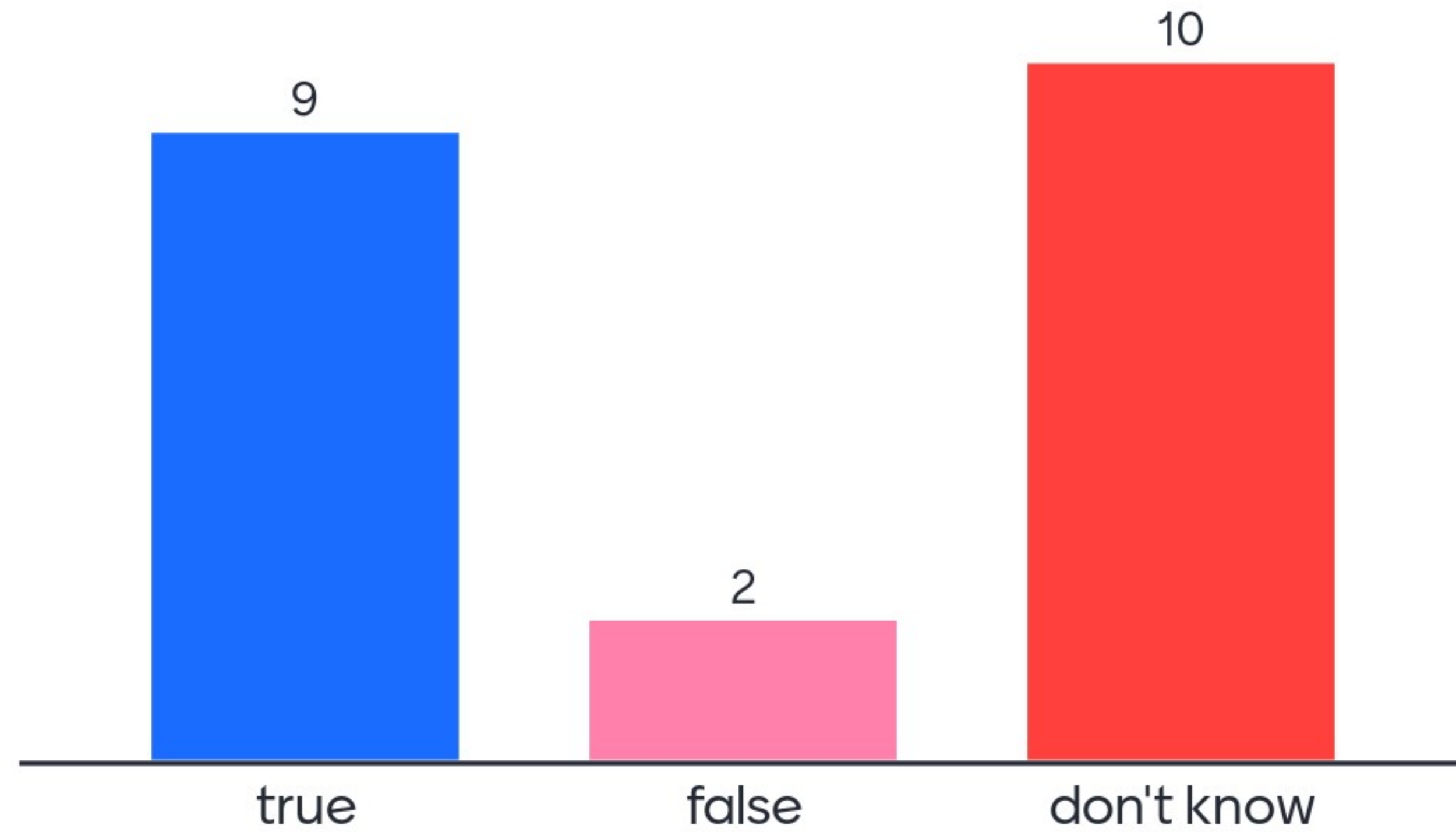
a worldwide system with openly accessible genomic information combined with capacity building for developing countries to increase their capacity to generate and use genomic data

# Issues related to access and benefit sharing of genomics data (DSI) will have a major impact on genebanks and the use of their material

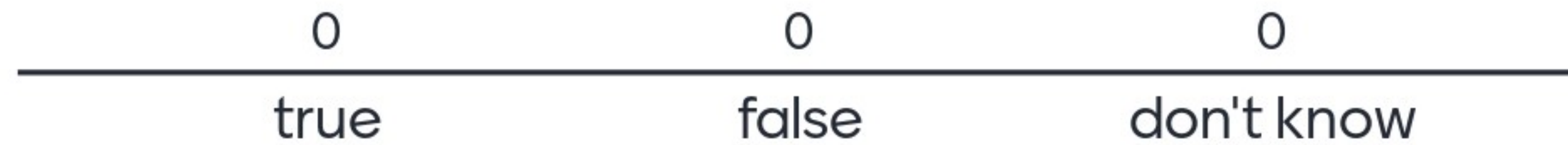




# The relevance of epigenetics to genetics resources conservation and use is underestimated



Epigenetic marks should play a more important role when creating genebank collections



Once sufficient genetic resources are sequenced,  
genebanks storing physical material are no longer needed.

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0	0	0	0
true	false	true for farm animals, false for crop plants	true for crop plants, false for farm animals



Did we neglect or forget aspects of the relevance of genomics to genebank management?

evolvability