Management of genomic information in genebanks

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1

Ideas on Bioinformatics and Genomic Data

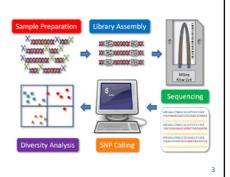
- More and more genomic data is being produced on animals of genebanks.
- Can be used to
 - perform genetic diversity studies,
 - selection of new animals for core collections of genebanks,
 - research on interesting traits that segregate in rare breeds and
 - population genetics/evolutionary studies.
- Available data:
 - Genotyping: AFLPs, microsatellites and SNPs
 - Sequencing: short reads, long reads, reference genomes, GBS



2

Inventory of topics

- 1) Storage of genomic data
- 2) Analysis tool for genomic data
- 3) Visualization tools for genomic data
- 4) Property and legal issues

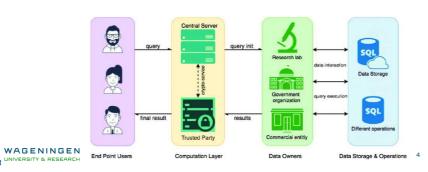


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3

1) Storage of genomic data

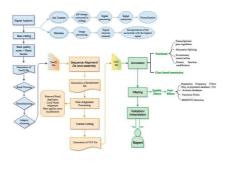
- How can data be stored effectively, cheap and safe?
- Do we store data in house or in the public domain?
- Do we want guidelines to harmonize data storage for collaboration purposes?



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2) Analysis tool for genomic data

- What tools are available in the public domain?
- What kind of expertise is needed to use these tools?
- Are specific tools needed for genebank related questions?





5

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3) Visualization tools for genomic data

- Do we want to link genomic data to current genebank data?
- What tools could we use and are they available?
- Do we want an European standard for visualization of genomic

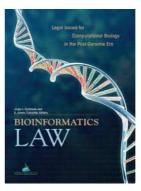
data in genebanks?



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4) Property and legal issues

- Who is the owner of the genomic data?
- Is there any agreement on the property or future use of the genomic data?





7

7

Summary

Need to prepare ourselves for using the genomic data, we need more information and practical solutions on several aspects related to genomic data.

Can and do we want to work on this together?





8



9

Steps

Make a team
Organize a kick off meeting
Workshop
Develop guideline

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10