



Institute of Population Genetics

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Institutional information



- **Institute of Population Genetics: 5 Research groups, 8 postdocs, 18 PhD students**
- **Host of the Plattform Bioinformatics and Biostatistics of the Vetmeduni**
- **DK: Vienna Graduate School of Population Genetics**



Hardware

- **28 Mac servers, 24 cores, 32GB memory**
- **Linux server: 8cores, 256GB memory**
- **Linux server: 16 cores, 32GB memory**

- **Cluster: 75 nodes Mac cluster (Mac servers and Mac minis), running Hadoop, main usage: NGS analysis in particular mapping of reads**



Personel, infrastructural setup

Bioinformatics and Biostatistics Plattform

DI Dr.nat.techn. Marlies Dolezal, MSc



Dr.rer.nat. Lukas Endler



Programmer



Ram Vinay Pandey MSc.

**Two groups with research and method development
in Bioinformatics: Schlötterer group, Kosiol group**



Scientific cases

Topic 1: Developing probabilistic models of sequence evolution and natural selection (Carolin Kosiol)

Example Projects:

- **Polymorphism-aware phylogenetic models (PoMo)**
- **Scans for positive selection in six mammalian genomes**
- **Contributions to Genome Sequencing and Analysis Projects (e.g., Orangutan, Giant Panda, Marmoset and Baboon Genome Consortium)**



Scientific cases

- **Topic 2: Studying natural variation in *Drosophila* species using Next Generation Sequencing (Christian Schlötterer)**

Example Projects:

- **PoPoolation software to analyse pooled Next Generation Sequencing data (Robert Kofler)**
- **Experimental Evolution in *Drosophila***
- **Evolution of transposable elements**
- **Evolution of gene expression using RNA-seq**



Thoughts and comments

- **Exchange through workshops on new NGS tools**
- **VSC4 (Vetmeduni had trial runs but not joined VSC)**
- **Storage (not as strict requirements as medical data but would be very useful)**