

– Molecular genetic laboratories in the Royal Belgian Institute of Natural Sciences –

- The molecular genetic laboratories in the RBINS host a number of staff scientists, MSc and PhD students as well as short- and long-term visitors
- Separate rooms are available for the different working phases
 - DNA extraction and **pre-PCR laboratory** (ca. 12 benches are available)
 - **Electrophoresis room** (for agarose gelelectrophoresis only – parallel running of ca. 6 electrophoreses are possible)
 - PCR and **post-PCR laboratory** (ca. 6 benches are available + DNA sequencing facility)
- **Standardised laboratory protocols** (SOPs) are used to facilitate the immediate start and a rapid continuation of the molecular works of everyone

– Molecular genetic laboratories in the Royal Belgian Institute of Natural Sciences –

- Capacities – DNA extraction and pre-PCR laboratory + floor:

- sample storage: **ultra-freezers** (-80°C), **freezers** (-20 – -30°C) and household **fridges** (enormous amount of storage place are needed...)

- own **pipette sets** for all longer-term workers (single- and multi-channel pipettes)



- DNA extraction: **thermomixers/shakers** for 3x24=72 tissue samples (lysis of samples: typical overnight process)

- 1 Eppendorf Thermomixer comfort
- 2 Eppendorf Thermomixer compact



- **laminar flows** for clean working conditions

- **centrifuges, vortexers, autoclave** and **incubator**

– Molecular genetic laboratories in the Royal Belgian Institute of Natural Sciences –

- Capacities – Spectrophotometer + Electrophoresis laboratory:
 - NanoDrop ND-1000 **spectrophotometer** (for checking DNA and PCR products – for measurements, 1µl of samples enough)
 - gel chambers, microwave, electrophoresis units etc.
 - real-time **gel documentation system** with digital data storage
 - ice-machine



– Molecular genetic laboratories in the Royal Belgian Institute of Natural Sciences –

- Capacities – PCR and post-PCR laboratory:
- **Thermocyclers** (PCR machines):
 - 4 Biometra TPersonal thermocycler (48 samples each)
 - 1 Biometra TGradient thermocycler (96 samples)
 - 1 Biometra TProfessional thermocycler (96 samples)
- ABI Prism 3130XL Genetic Analyzer (16-Capillary **Sequencer**)
 - up to 3x96 samples per day



- centrifuges, vortexers, PCs

