

## ***Graduate Program in Molecular Cell Biology:***

Course in: Molecular Biological Techniques

Lecturer: Manfred Grabner

**Number:** 041510

**Type:** VU Semester hours: 2

**Character:** Block of 5 days

**Time/Date:** WS; third slot of the semester

**Location:** Div. Biochemische Pharmakologie / Peter Mayr Str. 1

Limited number of places YES, number of places **6**, registration necessary YES

For registration or questions please contact 9003 70407; manfred.grabner@i-med.ac.at

**Aim:**

A short introduction into specific Molecular Biological approaches and working techniques to be trained in theory and practice.

**Description/contents:**

In addition to a theoretical introduction the participants of this lab course will get hands-on in determining their own CYP2D6 genotype by RFLP-analysis. Methods applied are:  
Isolation of genomic DNA from blood, PCR, RE-analysis, agarose gel electrophoresis. //  
Following the analytical RFLP procedure, preparative DNA techniques will be used in the second part of the course: Prep. PCR for RE site attachment, gel extraction of DNA fragments, ligation into a vector, transformation, plating, DNA mini- and midpreps to get the DNA ready for sequencing // Interpretation of sequence data by using computer programs.  
A more detailed description of the program & procedures will be sent to you as soon enrolled.

**Suggested reading:**

To become familiar with the evolutionary concept of polymorphism in general and with polymorph drug metabolizing enzymes (CYP2D6) in special – try to work through a paper (TIPS) that will be sent to you by e-mail before the class starts.