



Ministry of Health
National Pirogov Memorial Medical University

**Educational Scientific
Clinical and Diagnostic
PCR Laboratory**

Vinnytsya 2020

History of National Pirogov Memorial Medical University, Vinnytsya



History of VNMU

- **VNMU was established when the first President of the Ukrainian Academy of Sciences, academician D.K. Zabolotny, raised the question to the Government about the necessity of opening a medical educational institution in Vinnitsa to serve the nation's needs for health care.**



VNMU TODAY

- **At present, contingent of university's students is as follows (including foreign nationals): students - 6560 (including - 1030 part-time training), interns – 2149 MSc. course PG students - 63, post-graduate students – 110, PG students for doctor's degree - 1, clinical residents – 103, Faculty of Postgraduate Studies students – 2568.**
- **Today, NVMU has a teaching staff of 812 persons, with yearly enrollment of 4,000 students, including almost 2,000 in postgraduate education, representing specialties: Medicine, Pediatrics, Medical Psychology, Dentistry, Pharmacy, including specialty clinical pharmacy, and Postgraduate Education for physicians in more than 50 specialties. The University also provides preparatory training to help both citizens of Ukraine and foreign nationals enter institutions of higher education.**

**Ministry of Health
National Pirogov Memorial Medical University**

- Order to create a structural unit of National Pirogov Memorial Medical University «Educational Scientific Clinical and Diagnostic PCR Laboratory» №70 due to 28.12.2012.**
- Permission to work with pathogens III and IV class and recombinant DNA molecules №3745. – 02.2014.**
- Certificate of attestation №051/152. due to 03.2015.**

Equipment

The laboratory is equipped with a complete set of equipment for advanced molecular genetic research:

- **Amplifier Biorad CFX96**
- **Lab Centrifuge Labofuge 200**
- **Clinical centrifuge for test tubes**
- **Vortex microspin centrifuge FV-2400**



Equipment

- The thermostat with dry air TDB-120 M ‘Biosan’
- PCR desktop box with UV lamp UVC/T-M-FR ‘Biosan’
- Exhaust cabinet with laminar airflow BIO-II-A-CYTOSTAR



Equipment



Methods

DNA extractions (genomic, plasmid) are based on:

- ✓ Magnetic sorbents
- ✓ Ion exchange resins
- ✓ Sorption columns

Biological material can be extracted from:

1. Blood
2. Buccal epithelium
3. Tissue biopsies
4. Paraffin blocks



Studies of polymorphisms and mutations were carried out:

CYP2C9

CYP2C19

PRESS

SPINK

LEPR

NOS3

COL1

TGF1

OXA29;OXA40;VIM

IL1, IL4

Hp-CAG;VAG

TNF

BRCA1/2

SPORTGEN