The target of the Center is to develop innovative techniques for better clinical assessment of the cardiovascular system, based on measurements and analysis of near infrared light transmission through tissue. The main projects are:

1. Accurate automatic measurement of systolic blood pressure, which is mainly important for hypertensive elderly persons and hypotensive premature newborns.

2. Accurate measurement of oxygen saturation, which is mainly important for premature newborns, treated by oxygen supplementation.

3. Assessment of tissue blood perfusion, in newborns and adults.