

# LabTutor® for Nursing Education

Connecting bioscience with patient care



## Use real patients to engage students in bioscience

Build your students' bioscience knowledge around real patients and hands-on learning experiences with LabTutor for Nursing. LabTutor for Nursing is an innovative software that interweaves patient case studies and practical exercises to teach physiology and anatomy concepts.

Every LabTutor for Nursing exercise features real patients, presented through high-quality video and clinical test results. Each patient helps students learn to observe and apply core bioscience theory to clinical contexts, allowing students to benefit from case-based learning.

The complementary practical exercises transform students into active, independent and engaged learners. Students work in groups as they measure physiological parameters from each other, simultaneously illuminating textbook concepts and reflecting patient care scenarios.

## Address a range of nursing core competency requirements

By completing LabTutor for Nursing exercises your students will:

- Build their nursing careers on a strong and relevant bioscience knowledge base
- Experience and explore real clinical scenarios
- Learn to work as part of a cohesive team
- Understand the respect and empathy required in patient care
- Gain technological aptitude and confidence using computers and e-Learning tools

## Add an innovative and flexible learning approach to your syllabus

ADInstruments has been providing science teaching solutions for over 20 years, and we have worked closely with health care educators and clinical professionals to develop a specialised, technology-enhanced tool for nursing education.

LabTutor for Nursing offers a range of exercises to address different courses, and all exercise content can be edited to suit your students and course. With LabTutor Online, you can also give students remote access to LabTutor exercises for analysis, revision and report submission.

## Benefits for students

- Enhance understanding of bioscience and how it relates to patient care
- Develop confidence and competence measuring vital signs and other parameters
- Use patient videos and clinical tests to introduce a variety of illnesses, treatments and procedures
- Easily customise content to suit specific courses
- Help students fit study in with personal commitments with remote access using LabTutor Online

LabTutor increases student motivation and engages them, increasing their desire to learn. I have never had the students ask for more assignments before, but several students wanted a case study for each type of disease process.

Previously, students were prone to just memorising facts and were not interested in understanding why. With LabTutor, their learning is at a deeper level, something they will remember years from now, not just for the next test.

**Lynn Phillips RN, MSN**  
Instructor, Beth-El College of  
Nursing, Colorado Springs

# Explore a LabTutor exercise step-by-step

## Lung Function exercise stage 2: real patient case studies

LabTutor for Nursing's patient case studies enable students to explore a wide range of patients, diseases and procedures at their own pace. ADInstruments holds written informed consents from all patients, relatives, and health professionals for the use of the videos, the investigation results and other materials used in these cases, and all promotional materials related to them.

### Video

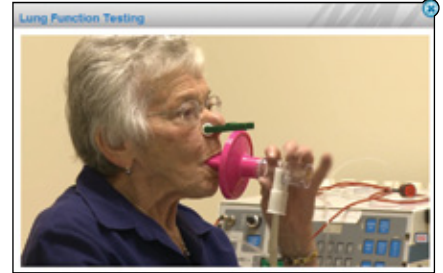
Students find out more about Mrs M through a series of high-quality videos.



Mrs M describes her symptoms, their effect on her lifestyle, and her clinical care experiences.



Mrs M's husband relates his concerns. Students observe how walking affects Mrs M's breathing.



Students also watch Mrs M undergo a lung function test in a hospital respiratory laboratory.

### Clinical data and test results

Students gain further insight into Mrs M's condition through her clinical test results.



Students are provided with Mrs M's blood (screens, white cells, gases, pH and glucose) and urine test results over a three year period.



Students view and compare animated CT scans of Mrs M's diseased lungs with similar images of healthy lungs.



Students see Mrs M's lung capacities and pulmonary function tests in the same format as their own measurements (made in stage 1).

### Report and nursing summary

Students are asked to compare their own in-class measurements to Mrs M's clinical data, and explain how the altered physiology affects the patient's abilities, relationships and quality-of-life. Students must also link patient treatment and care to the underlying bioscience theory. After students have submitted their report (either as a group or individually) a healthcare professional provides a video summary of the nursing issues relevant to Mrs M and her care.

#### What educators say...

"I use LabTutor with nursing students to revisit and rework physiology lecture material in a new setting. It brings a tutorial aspect into the course and I have no doubt completing hands-on practical exercises improves students' understanding. In addition, taking physiological measurements from each other gives students some insight into what it may be like for a patient, in terms of being subjected to a whole variety of potential interventions. This method of learning is more interesting for students, and their feedback has always been very positive."

Dr Therese Ruane-O'Hara, University College Cork, Ireland