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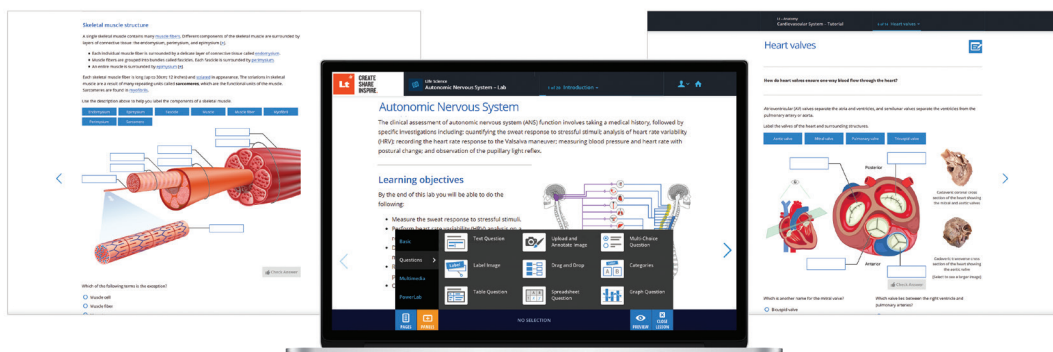
# Lt Content List

Lessons, experiments and Patient Case Library resources

JUNE 2020



Lt is a cloud-based learning platform for health professional courses that helps you bridge the gap between theory and practice.



## Anatomy

- Cardiovascular System
- Central Nervous System
- Endocrine System
- Gastrointestinal System
- Integumentary System
- Lymphatic and Immune Systems
- Muscular System
- Reproductive System
- Respiratory System
- Skeletal System
- Special Senses
- Tissues
- Urinary System

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- ● ●
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KEY: ● Dissection Lab ● Histology Lab ● Model Lab

## Animal Physiology

- Animal Metabolism
- Cockroach Sensory Nerve
- Cockroach Ventral Nerve Cord
- Earthworm Action Potentials
- Earthworm Smooth Muscle
- Frog Heart
- Frog Nerve
- Frog Neuromuscular Junction
- Frog Skeletal Muscle
- Gin Trap Closure Reflex
- Intracellular Action Potentials

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- ●
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KEY: ● Pre-lab ● Lab





## Biology (for use with Vernier Go Direct® Sensors)

Acid Rain	●
Animal Behaviour	●
Aquatic Photosynthesis	●
Bacterial Transformation	●
Biological Membranes	●
Cellular Respiration	●
Diffusion Through Membranes	●
Enzyme Action: Testing Catalase Activity	●
Genetics of Drosophila	●
Interdependence of Plants and Animals	●
Limitations on Cell Size	●
Metabolisation of Sugars by Yeast	●
Mitosis and Meiosis	●
Photosynthesis	●
Population Dynamics	●
Population Genetics and Evolution	●
The Visible Spectra of Plant Pigments	●
Transpiration	●
Turnip Peroxidase	●

KEY: ● Lab

## Clinical Skills

Assessment Tools	● ● ●
Clinical Measurements I	● ● ●
Clinical Measurements II	● ● ●
CPR	●
Fluid and Nutrition	● ● ●
Health History and General Survey	● ● ●
Health Literacy	● ● ●
Health Promotion and Community Nursing	● ● ●
Hygiene and Personal Care	● ● ●
Medical Administration I	● ● ●
Medical Administration II	● ● ●
Oxygen Therapy	● ● ●
Peripheral Assessment	● ● ●
Promoting Comfort	● ● ●
Safety	● ● ●
Sterile Fields	● ● ●
Supporting Elimination	● ● ●
Therapeutic Communication	● ● ●
Vital Signs	● ● ●

KEY: ● Preparation ● Practice ● Quiz

## Exercise Physiology

Aerobic Fitness Testing	○ ● ●
Anaerobic Fitness Testing	○ ● ●
Cardiorespiratory Effects of Exercise	○ ● ●
Cardiovascular Effects of Exercise	● ● ●
Energy Expenditure and Exercise	● ● ●
Energy Metabolism	● ● ●
Introduction to Fitness Testing	● ● ●

KEY: ○ Tutorial ● Pre-lab ● Lab

## Human Physiology

Airflow	○ ● ●
Autonomic Nervous System (ANS)	○ ● ●
Blood Clotting	○ ● ●
Blood Counting	○ ● ●
Blood Pressure	○ ● ●
Body Temperature	○ ● ●
Breathing	○ ● ●
Cardiorespiratory Effects of Exercise	○ ● ●
Cardiovascular Effects of Exercise	● ● ●
Diving Response	○ ● ●
Electroencephalography (EEG)	● ● ●
Electro-oculography (EOG)	● ● ●
Energy Expenditure & Exercise	● ● ●
Glucose Absorption	○ ● ●
Heart & ECG	○ ● ●
Heart & Peripheral Circulation	○ ● ●
Heart Sounds	○ ● ●
Kidney & Urine	○ ● ●
Lung Volumes	○ ● ●
Mechanics of Ventilation	○ ● ●
Muscle & EMG	○ ● ●
Peripheral Nerve Function	○ ● ●
Reflexes and Reaction Times	● ● ●
Sensory Illusions	● ● ●
Sensory Physiology	● ● ●
Skeletal Muscle Function	○ ● ●
Spinal Reflexes	○ ● ●
Stroop Test	● ● ●
Water Balance	○ ● ●

KEY: ○ Tutorial ● Pre-lab ● Lab



## Neuroscience

Autonomic Nervous System	○ ● ●
Biofeedback	● ●
Cockroach Sensory Nerve	● ●
Cockroach Ventral Nerve Cord	● ●
Diving Response	○ ● ●
Earthworm Action Potential	● ●
Electrodermal Response (EDR)	● ●
Electroencephalography (EEG)	● ●
EDR & Classical Conditioning	● ●
Electrooculography (EOG)	● ●
Frog Nerve	● ●
Frog Neuromuscular Junction	● ●
Intracellular Action Potentials	● ●
Muscle & EMG	○ ● ●
Peripheral Nerve Function	○ ● ●
Sensory Illusions	● ●
Sensory Physiology	● ●
Size-Weight Illusion	● ●
Skeletal Muscle Function	○ ● ●
Spinal Reflexes	○ ● ●
Stroop Test	● ●
Visual Evoked Potentials	● ●

KEY: ○ Tutorial ● Pre-lab ● Lab

## Nursing

Blood Pressure	● ● ● ● ●
Childbirth	● ● ● ● ●
COPD	● ● ● ● ●
Diabetes Complications	● ● ● ● ●
Febrile Child	● ● ● ● ●
Heart Failure Stroke	● ● ● ● ●
Muscular Dystrophy	● ● ● ● ●
Myasthenia Gravis	● ● ● ● ●
Myocardial Infarction	● ● ● ● ●
Peripheral Vascular Disease	● ● ● ● ●
Pregnancy	● ● ● ● ●
Renal Failure	● ● ● ● ●
Type 1 Diabetes	● ● ● ● ●

KEY: ● Case Study ● Patient Education ● Evaluation ● Lab ● Scenario

### Important Notes

- *Getting started with Lt sampling* can be included in each course and may also include an introduction to sampling for courses with labs.
- Some modules may also include multiple Tutorials.

## Pharmacology

Airways Resistance	● ●
Chick Biventer Cervicis	● ●
Mammalian Atria	● ●
Mammalian Diaphragm	● ●
Mammalian Heart	● ●
Mammalian Jejunum	● ●
Mammalian Uterus	● ●
Stimulated Ileum	● ●
Stimulated Rat Vas Deferens	● ●
Toad Rectus Abdominis	● ●
Unstimulated Ileum	● ●
Unstimulated Ras Vas Deferens	● ●
Vascular Resistance	● ●
Vascular Smooth Muscle	● ●

KEY: ● Pre-lab ● Lab

## Preclinical Medicine

Airflow	○ ● ● ● ●
Autonomic Nervous System	○ ● ● ● ●
Blood Pressure	○ ● ● ● ●
Body Temperature	○ ● ● ● ●
Brain Structures and Reflexes	○ ● ● ● ●
Glucose Absorption	○ ● ● ● ●
Heart and ECG	○ ● ● ● ●
Heart and Peripheral Circulation	○ ● ● ● ●
Heart Sounds	○ ● ● ● ●
Kidney and Urine	○ ● ● ● ●
Lung Volumes	○ ● ● ● ●
Muscle and EMG	○ ● ● ● ●
Peripheral Nerve Function	○ ● ● ● ●
Skeletal Muscle Function	○ ● ● ● ●

KEY: ○ Tutorial ● Pre-lab ● Lab ● Case Study ● Evaluation

## Psychophysiology

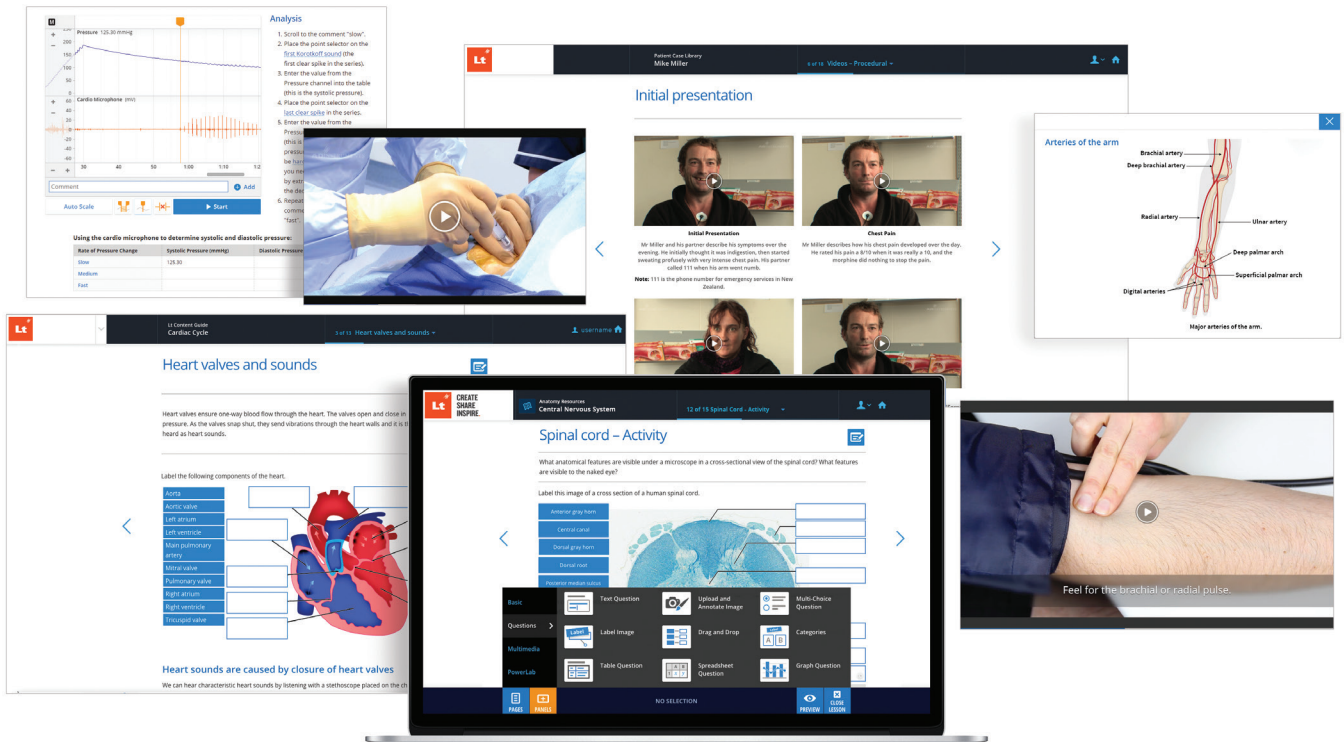
Biofeedback	● ●
Diving Response	○ ● ●
EDR and Classical Conditioning	● ●
Electrodermal Response (EDR)	● ●
Electroencephalography (EEG)	● ●
Electrooculography (EOG)	● ●
Introduction to Psychophysiology	● ●
Muscle and EMG	○ ● ●
Reflexes and Reaction Times	○ ● ●
Sensory Illusions	● ●
Sensory Physiology	● ●
Size-Weight Illusions	● ●
Visual Evoked Potentials	● ●

KEY: ○ Tutorial ● Pre-lab ● Lab



# Patient Case Library

## Overview



## What's in a Patient Pack?

Each patient's medical story is different, so each case has different content to use in your teaching.

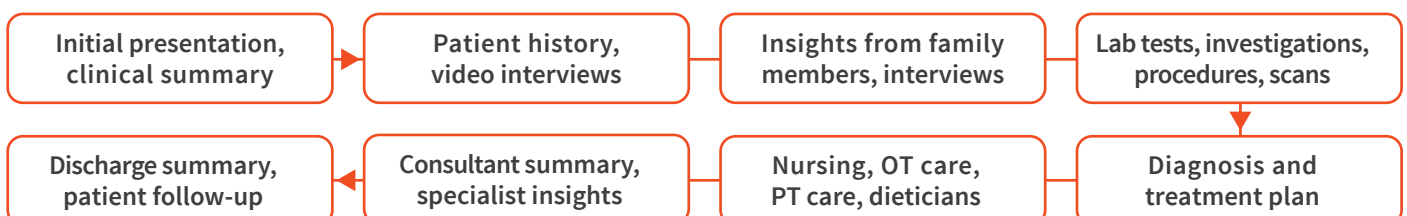
A typical patient pack can include:

- A short clinical summary (similar to a medical letter) and a chronological clinical summary
- Video interviews with patients and relatives as well as health care professionals (Consultant, Nurse, OT, PT, Specialised Technicians and Dieticians). Each video includes subtitles and a captioned summary
- Video of clinical examinations and medical procedures, including subtitles and captions
- Lab test results: SI and non-SI units
- Specialised investigations such as chest X-rays, ECGs, MRI, and CT scans
- A discharge summary
- Suggested teaching topics

## Combine different patient resources and incorporate your own content to:

- Teach pathophysiology
- Alternate teaching cases across years
- Illustrate a scientific concept, such as how to read an MRI
- Compare different presenting symptoms for the same condition
- Follow a patient's story through your curriculum, building the case's complexity, or examining different aspects of a patient's condition
- Provide supplementary cases for students to expand and consolidate their learning

## Typical patient journey



# Patient Case Library

## List of patients currently available for Lt

### Alfred Ashmore

#### Renal function

Kidney failure, polycystic kidney disease, transplant, renal function tests, dialysis, peritoneal dialysis, hemodialysis.

### Angela Williams

#### Reproductive physiology/obstetrics and gynaecology

Menorrhagia, IUD (intrauterine device), forms of contraception, treatment of heavy bleeding, hysterectomy, anaemia, blood film, pipelle endometrial biopsy – indications, vaginal swab – indications.

### Barry West

#### Neurological conditions

Stroke, cerebral circulation stroke recovery, rehabilitation, hemianopia hypertension procedures, neurological examination, CN exam, eye exam, CT, MRI.

### Ben Wolfe

#### Complications of diabetes

Type 2 diabetes, autonomic and peripheral neuropathy, cellulitis, charcot joints.

### Betty Flannery

#### Left ventricular failure

Left ventricular failure, heart failure, weight gain, acute onset of shortness of breath, hyponatremia.

### Carol Campbell

#### Endocrine and metabolic disorders

Type 1 diabetes, hyperglycaemia, hypoglycaemia, insulin, glucose, HbA1c, thyrotoxicosis, Graves disease, reactive arthritis, salmonella, insulin pump.

### Charlie Park

#### Coronary artery disease

Myocardial infarction, angina pectoris, stable angina, bypass surgery, dizziness, cardiovascular disease, coronary artery disease, left main stenosis, triple vessel disease, high cholesterol.

### Chris Rawlins

Diabetes, renal impairment, kidney transplant, colostomy, post transplant, proliferative lymphoma.

### David Marks

#### Silent myocardial infarction

Myocardial infarction, silent MI, CABG, PVD (peripheral vascular disease), hypertension.

### Emma Smith

Glomerulonephritis, Wegener's granulomatosis, septic arthritis, ESR, remission, kidney disease, microscopic polyangiitis, small vessel vasculitis, septic arthritis, pre-eclampsia, preeclampsia, toxemia, PIH.

### Frank Foster

Becker muscular dystrophy, X-linked disorders, creatine kinase, OSA, obstructive sleep apnea, degenerative muscle weakness, supportive care.

### Gwen Simms

Osteoarthritis, hip, replacement, chronic, pain.

### Harry Barker

Glucose-6-phosphate dehydrogenase deficiency, G6PD, Wegeners, laryngitis, laryngeal webs, stridor, hoarseness, iron overload, hepatitis B, hemolysis.

### James Hinton

Aortic stenosis, aortic valve replacement, angiogram, ECG.

### James Lester

Hypertension, renal artery stenosis, angina pectoris, sympathectomy technique.

### Jenny Lincoln

Pregnancy, childbirth, preterm labor, pre-eclampsia, stages of labor.

### Joe Hunter

Chronic liver cirrhosis, hepatitis C, decompensation, interferon and ribavirin treatment.

### John Wise

Atrial fibrillation, heart failure, irregular heartbeat.

### Liam McFadden

Fever, paediatric care, taking a temperature, body temperature, thermoregulation.

### Mary Montgomery

COPD, chronic bronchitis, emphysema, pulmonary fatigue, lung volume, breathlessness.

### Max Chaves

#### Restrictive lung disease

Pulmonary fibrosis, restrictive lung disease, dyspnea, lung transplantation, steroid therapy, spirometry.

### Mike Miller

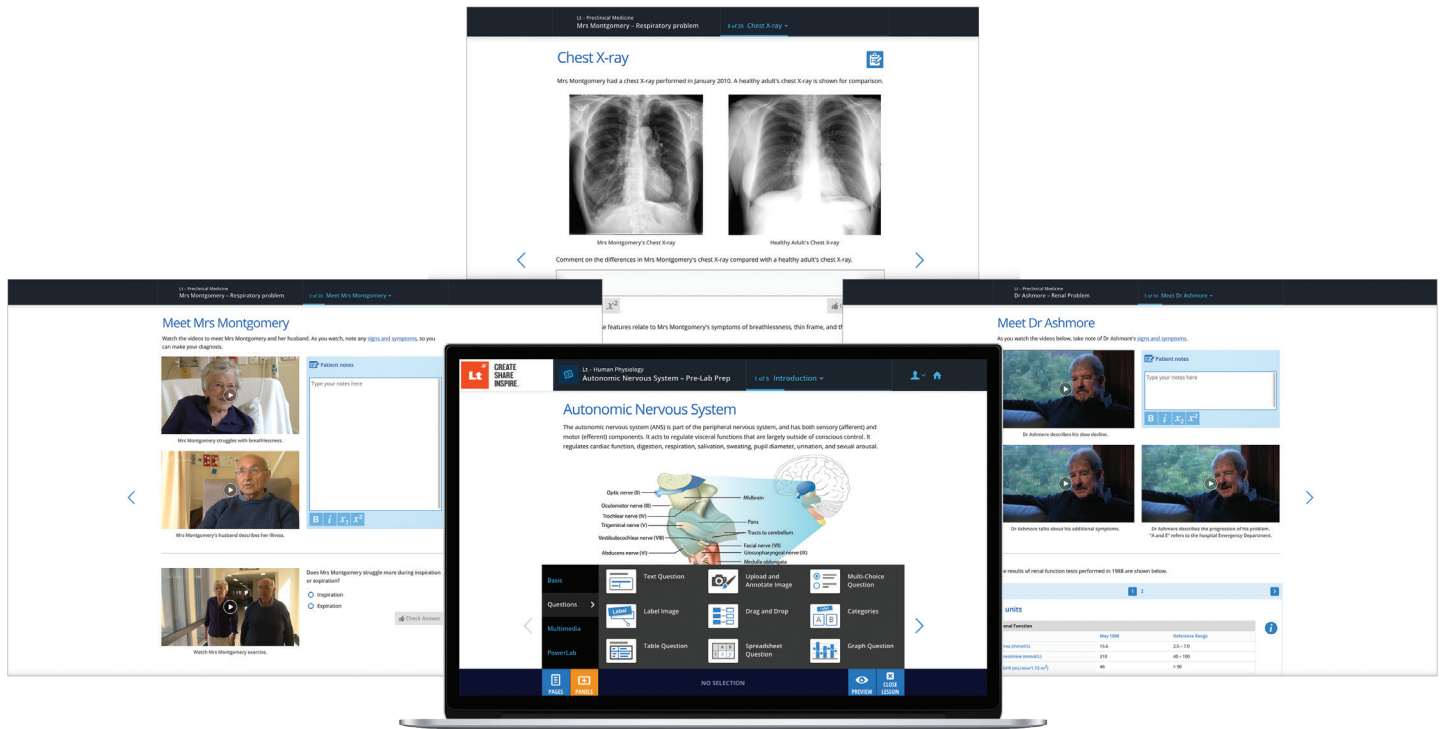
Myocardial infarction, STEMI, coronary artery disease, atherosclerosis, fibrinolysis, smoking, cardiac arrest, defibrillation, catheterization laboratory, coronary angiogram, angioplasty, acute S-T elevation.

### Nick Blair

Guillain-Barré syndrome, neurological examination, neurophysiology reports, lumbar puncture, rehabilitation, physiotherapy, occupational therapy, immunoglobulin therapy.

### Penny Parker

Von Willebrand's disease, tranexamic acid, heavy menstruation, ablation therapy, menorrhagia.



List of patients currently available for Lt continued:

### Pete Winslow

Peripheral Neuropathy.

### Rachael Pearson

Myastheniagravis, diplopia, blurry vision, cranial nerves, eye movements, facial nerve palsy - differential diagnoses, fistula - indications, immunoglobulin therapy, plasmapheresis, immunosuppressive therapy.

### Sam Dixon

Claudication, endarterectomy, atherosclerosis, peripheral vascular disease, vascular studies, abdominal aortic aneurysm, peripheral artery disease, triple A, atherosclerosis, plaque.

### Sarah King

Incontinence, bladder irritation, urinary tests, pelvic floor exercises, depression.

### Thomas Alexander

Aortic incompetence, valve replacement, bicuspid aortic valve disease (BAVD), bradycardia, heart murmur.

### Tim Scott

Myocardial infarction, STEMI, acute coronary syndrome, coronary artery disease, hyperlipidaemia.

### Zac Thayer

Respiratory hyper-responsiveness, asthma, childhood, eczema.

## Privacy and consent

All of our patients have provided written, informed consent for their medical story to be used to support health professional learning. Because these are real people, we have given each patient and their family members pseudonyms to protect their identities.

Our patients have all viewed and approved the content to be used to develop learning resources. This gives you the freedom to use these detailed real-life resources to create and customise comprehensive medical cases suited to your teaching process.

*“Lt’s real patient case studies make theory highly clinically relevant and engaging for our students.”*

- **Jack Simpson**, Lecturer, Nursing  
University of the West of Scotland



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[adi.to/lt](http://adi.to/lt)

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