

Curriculum for Specialized Subjects

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1. Program Purpose and Goals

○ **Purpose**

- To provide hands-on training in advanced minimally invasive surgery
- To teach core techniques of laparoscopic and robotic surgery practiced in the Department of Surgery at Chungbuk National University Hospital.

○ **Goals**

- To transfer up-to-date laparoscopic and robotic surgical skills
- To enhance clinical competency in minimally invasive gastrointestinal surgery
- To prepare the trainee to independently perform standardized procedures with improved safety and efficiency

2. Program Overview

- Basic surgical skills training (simulation, dry lab, wet lab)
- Stepwise laparoscopic technique training (camera handling, trocar placement, lymph node dissection, stapling technique)
- Robotic surgery system orientation and console training (Da Vinci platform)
- Clinical observation of advanced robotic and laparoscopic procedures (gastrectomy, colectomy, bariatric surgery)

3. Personnel Information

- Professor

Picture	Department	Department of Surgery, Chungbuk National University Hospital	Specialty	Gastrointestinal Surgery, Bariatric & Metabolic Surgery, Minimally Invasive Surgery (Laparoscopic & Robotic Surgery)
	Education & Professional Activities	<ul style="list-style-type: none"> - Professor, Department of Surgery, Chungbuk National University College of Medicine - Board-certified General Surgeon (Korean Surgical Society) - Fellowship in Gastrointestinal Surgery - Specialist in minimally invasive, laparoscopic, and robotic gastrointestinal surgery - Active clinical and research work in gastric cancer surgery, bariatric/metabolic surgery, and advanced MIS techniques - Member, Korean Society for Metabolic & Bariatric Surgery - Member, Korean Society of Endoscopic & Laparoscopic Surgeons 		
Kim Dae Hoon				

○ **Other Personnel**

Name	Department Name	Duties	Note
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Lee Teak Goo	Department of Surgery, Chungbuk National University Hospital	Laparoscopic & Robotic Surgery Supervision Clinical Observation Guidance Technical Skill Feedback	Professor
		Technical Skill Feedback	

④ Detailed Program Schedule

- (1 week)
 - Orientation to the Department of Surgery
 - Laparoscopic & robotic surgery systems introduction
 - Basic OR protocol / safety training
 - Observation of simple laparoscopic procedures
- (2 week)
 - Basic surgical skills training (camera handling, trocar placement)
 - Dry lab simulation (instrument handling, suturing)
 - Observation: laparoscopic cholecystectomy
- (3 week)
 - Intermediate laparoscopic skills (energy devices, dissection technique)
 - Introduction to robotic console operation
 - Observation: laparoscopic gastrectomy (early gastric cancer case if available)
- (4 week)
 - Advanced robotic surgery training (console practice, docking, EndoWrist)
 - Stepwise review of robotic gastrectomy and colectomy

- Participation in surgical team rounds & discussion
- (5 week)
 - Comprehensive skill review
 - Case discussion with supervising professors (including Prof. Lee Taek Goo)
 - Feedback session & training progress evaluation
 - Summary report and next-stage training planning

Gastroenterology Curriculum (Korean)

① Training Purpose and Objectives

- Training Objectives
 - Clinical understanding of the holistic treatment of gastrointestinal diseases (esophagus, stomach, small intestine, and colon)
 - Patient care through multidisciplinary care
- Training Curriculum
 - Endoscopic examinations or procedures: upper and lower gastrointestinal endoscopy, EUS (endoscopic ultrasound), ESD (endoscopic submucosal dissection), EMR (endoscopic mucosal resection), ERCP (endoscopic retrograde cholangiopancreatography), etc.

② Training Introduction

No	Curriculum		Note
	Korean	English	
1	Gastrointestinal endoscopy (stomach, colon, etc.) observation	Gastrointestinal Endoscopy & Colonoscopy observation	
2	Outpatient observation	Outpatient observation	
3	Acquisition of manual techniques for gastrointestinal endoscopy	Mastering the skill of Gastrointestinal Endoscopy& Colonoscopy	
4	Diagnosis and treatment of gastrointestinal endoscopic diseases	Diagnosis and treatment of Gastrointestinal endoscopy& Colonoscopy diseases	
5	Developing the ability to interpret gastrointestinal endoscopic examinations (EUS, ESD, EMR, ERCP, etc.)	Mastering of Gastrointestinal Endoscopy & Colonoscopy specific tests (EUS, ESD, EMR, ERCP etc)	
6	Conference, Journal Review Attendance	Participate in daily Conference, Journal Review	

○ Other Personnel

Last Name Ham	Department Name	Duties	note
000	Department of Gastroenterology	Clinical Professor	

④ Weekly curriculum

	Month (Monday)	Fury (Tuesday)	Number (Wednesday)	Neck (Thursday)	Gold (Friday)
7:50-	Grand Round (G.I conference)	Journal Review	GI Conference	GI Conference	Journal Review Case Presentation
8:30-	Division Staff Rounds				
9:30-	Gastrointestinal Examination (gastroscopy & colonoscopy)				
12:30-	Lunch-Time				
13:30-	Gastrointestinal Examination (Gastroscopy & Colonoscopy)				
16:00-	Ward Rounds	Korean Language Class 16:00	Ward Rounds	Korean Language Class 16:00	

Gastroenterology

1. Program purpose and Goals

○ Purpose

- Providing comprehensive care for diseases of the gastrointestinal tract (esophagus, stomach, small intestine and colon)
- Emphasizing a team approach, enlisting the cooperation of other departments in providing a multi-disciplinary approach to patient care

○ Training Curriculum

- Endoscopic examinations or procedures: Upper and lower GI Endoscopy, EUS (Endoscopic Ultrasonography), ESD (Endoscopic Submucosal Dissection), EMR (Endoscopic Mucosal Resection), ERCP (Endoscopic Retrograde Cholangio-Pancreatography) etc.

2. Program Overview

○ Weekly Training Program

No	Curriculum	
	Training content	Contents
1	Gastrointestinal endoscopy (stomach, colon, etc.) observation	Gastrointestinal Endoscopy & Colonoscopy observation
2	Outpatient observation	Outpatient observation
3	Acquisition of Manual Techniques for Gastrointestinal Endoscopy	Mastering the Skill of Gastrointestinal Endoscopy& Colonoscopy
4	Diagnosis and Treatment of Gastrointestinal Endoscopic Diseases	Diagnosis and Treatment of Gastrointestinal Endoscopy& Colonoscopy Diseases
5	Cultivating the ability to interpret gastrointestinal endoscopic examinations (EUS, ESD, EMR, ERCP etc)	Mastering of Gastrointestinal Endoscopy & Colonoscopy specific tests (EUS, ESD, EMR, ERCP etc)
6	Conference, Journal Review Attendance	Participate in daily Conference, Journal Review

3. Personnel Information

○ Professor

	Department	Gastroenterology	Specialty	digestive system, Gastrointestinal Endoscopy & Colonoscopy
	Education & Professional Activities			
000 (M.D.)				

○ Other personnel

Name	Department name	Duties	Note
000	Gastroenterology	Clinical Professor	

4. Detailed Program Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
7:50-	Grand Round (G.I conference)	Journal Review	GI conference	GI conference	Journal review case presentation
8:30-	Division Staff rounds				
9:30-	Gastrointestinal endoscopy & Colonoscopy				
12:30-	Lunch-time				
13:30-	Gastrointestinal endoscopy & Colonoscopy				
16:00-	Rounding	Korean Language Class	Rounding	Korean Language Class	

Respiratory Medicine Curriculum (Korean)

① Purpose and Objectives of the Course

○ Purpose of the Course

- To train respiratory medicine specialists with extensive knowledge and skills.

○ Goals of the Course

- To develop an understanding of the overall treatment of respiratory diseases.

- To acquire bronchoscopic techniques.

② Introduction to the Course

	Month (Monday)	Fury (Tuesday)	Number (Wednesday)	Neck (Thursday)	Gold (Friday)
08:00 ~ 09:00	Observing outpatient treatment Outpatient Clinic.	Ward Rounds	Outpatient Clinic.	Ward Rounds	Ward Rounds
09:00 ~ 12:00		Acquiring bronchoscopic techniques Bronchoscopy		Outpatient treatment Outpatient Clinic.	Acquiring bronchoscopic techniques Bronchoscopy
13:00 ~ 17:00		Korean language class 16:00	Acquiring bronchoscopic techniques Bronchoscopy	Korean language class 16:00	
17:00 ~ 18:00					

③ Introducing Dedicated Staff

○ Supervisor

	Department	Respiratory Medicine	Field of study	Pneumonia, chronic obstructive pulmonary disease, acute respiratory distress syndrome, respiratory failure
000 (Professor)	Resume			

○ Other Personnel

Last name Ham	Department name	Duties	Note
000	Respiratory Medicine	Clinical Professor	

④ Weekly Curriculum

	Period	Educational Content
(First Quarter)	(First Week)	Orientation
	(Second Week)	Journal Club/Staff Meeting
	(Third Week)	Study for respiratory disease
	(Fourth Week)	Respiratory Disease Education

(Second Quarter)	(First Week)	Chronic Obstructive Pulmonary Disease: COPD
	(Second Week)	Pneumonia
	(Third Week)	Train for operations of bronchoscopy
	(Fourth Week)	Train for operations of bronchoscopy Summary

Pulmonology

1. Program purpose and Goals

o Purpose

- Educate specialists in pulmonology with a wide range of knowledge and skills

o Goals

- Providing comprehensive care for pulmonology disease
- Training skills and operations of bronchoscopy

2. Program Overview

o Weekly Training Program

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00 ~ 09:00	Outpatient Clinic	Ward Rounds	Outpatient Clinic	Ward Rounds	Ward Rounds
09:00 ~ 12:00		Bronchoscopy		Outpatient Clinic	Outpatient Clinic
13:00 ~ 17:00		Korean Language Class	Bronchoscopy		Korean Language Class
17:00 ~ 18:00					

Personnel Information

o Professor

000 (M.D.)	Department	Pulmonology	Specialty	Lung cancer examination, Intensive respiratory patient care, Ultrasonic bronchoscopy, respiratory system
	Education & Professional Activities			

o **Other Personnel**

Name	Department Name	Duties	Note
000	Pulmonology	Clinical Professor	

4. Detailed Program Schedule

	Period	Contents
First Quarter	First Week	Orientation
	Second Week	Club/Staff Meeting
	Third Week	Study for respiratory disease
	(Fourth Week)	Study for respiratory disease
Second Quarter	(First Week)	Chronic Obstructive Pulmonary Disease: COPD
	(Second Week)	Pneumonia
	(Third Week)	Train for operations of bronchoscopy
	(Fourth Week)	Train for operations of bronchoscopy Summary

Samples from other Departments

Urology Curriculum

① Course Objectives and Goals

- Course Objectives
- To train urologists with extensive knowledge and skills.
- Course Objectives

- To acquire general knowledge and skills related to urology.
- To acquire urological surgical techniques.
- ② Course Introduction
- Practical education through diverse clinical cases.
- Active information sharing and discussion.
- ③ Introduction to Dedicated Staff
- Supervisor

	Department	Department of Urology	Field of study	Tumors, laparoscopy, children, urinary disorders, female urinary tract, urinary tract infections and injuries
000 (Clinical Assistant Professor)	Resume			

○ Other Personnel

Last name Ham	Department name	Duties	Note
000	Department of Urology	Clinical Professor	

④ Weekly Curriculum

- (Week 1)
- Orientation
- Observation of outpatient examinations
- (Week 2)
- Observation of endoscopic surgery
- (Week 3)
- Observation of robotic surgery
- (Week 4)
- Observation of pediatric surgery
- (Week 5)
- Observation of open surgery
- (Week 6)
- Observation of laparoscopic surgery

- (Week 7)
- Acquisition of laparoscopic surgical techniques
- Summary

Urology Curriculum

1. Program purpose and Goals
 - Purpose
 - Educate specialists in urology with a wide range of knowledge and skills
 - Goals
 - Providing comprehensive care for urologic disease
 - Training surgical technique of urology
2. Program Overview
 - Practical training through various clinical cases
 - Active sharing and discussion
3. Personnel Information
 - Professor

	Department	Urology	Specialty	Tumor, laparoscopy, prostate, female urology, pediatric urology
000 (M.D.)	Education & Professional Activities			

○ Other Personnel

Name	Department name	Duties	note
0	Urology	Clinical Professor	

4. Detailed Program Schedule

- (1 week)
- Orientation, Observation of Outpatient clinic
- (2 weeks)
- Observation of Endoscopic Surgery
- (3 weeks)
- Observation of Robotic Surgery

- (4 weeks)
- Observation of Pediatric Surgery
- (5 weeks)
- Observation of Open Surgery
- (6 weeks)
- Observation of Laparoscopic Surgery
- (7 weeks)

Mastering of Laparoscopic Surgery

Summary

Surgical Curriculum

1. Purpose and Objectives of the Course

○ Purpose of the Course

- To train surgical specialists with extensive knowledge and technical skills.

○ Objectives of the Course

- To acquire general surgical knowledge and skills.

- To acquire hepatobiliary and pancreaticobiliary and gastrointestinal surgical techniques.

2. Course Introduction

○ Curriculum

No	Curriculum		Note
	Korean	English	
1	15 or more operating room visits	Surgery observation over 15 times	
2	Outpatient participation for 15 days or more	Outpatient observation over 15 times	
3	Acquiring the skills of major and minor surgery	Mastering the skill of large, medium Hepatobiliary, Gastrointestinal, Endocrine surgeon case	
4	Diagnosis and treatment of surgical diseases	Diagnosis and treatment of Hepatobiliary, Gastrointestinal, Endocrine surgeon diseases	
5	Cultivating the ability to interpret surgical examinations (chest x-ray, surgical CT, MRI et.)	Mastering of Hepatobiliary, Gastrointestinal, Endocrine surgeon case and specific tests (chest x-ray, surgical CT, MRI etc)	
6	Lectures Attendance (more than 20 times in the hospita)	Participate in daily Lectures over 20 times	

○ Training Course Plan

Detail	Supervisor
1. Surgical Skills Training, Case 1. 2. Surgical Skills Training, Case 2. 3. Mental confusion and cognitive impairment during surgery. 4. Consciousness and memory during general anesthesia. 5. Postoperative pain management.	000

③ Introducing Dedicated Staff

○ Supervisor

	Department	Surgery	Field of Study	Liver, Biliary Tract, Pancreas
000 (Supervisor)	resume			

○ Other Personnel

Last name Ham	Department name	Duties	Note
000	Surgery	Clinical Assistant Professor	

④ Weekly Curriculum

This Day	Detail
(Monday)	- Attend a morning meeting - Introduction to the Department of Surgery at Chungbuk National University Hospital - Visit to the operating room - Continuing education
(Tuesday)	- Attend the morning meeting - Continuing education - Visit the operating room - Discussion: Case studies of preoperative testing
(Wednesday)	- Attend morning meeting - Continuing education - Visit to operating room - Discussion: Overall management of surgical patients
(Thursday)	- Attend a morning meeting - Continuing education - Visit the operating room - Discussion: Acute and Critical ICU Care
(Friday)	- Attend morning meetings - Attend training sessions - Visit operating rooms and participate in surgeries

Surgery Curriculum

1. Program purpose and Goals

o Purpose

- Educate specialists in surgery with a wide range of knowledge and skills

o Goals

- Providing comprehensive care for surgical disease

- Training surgical technique of surgery

2. Program Overview

o Surgery Training Curriculum

No	Curriculum	Note
1	Surgery observation over 15 times	
2	Outpatient observation over 15 times	
3	Mastering the skill of large, medium Hepatobiliary, Gastrointestinal, Endocrine surgery	
4	Diagnosis and treatment of Hepatobiliary, Gastrointestinal, Endocrine diseases	
5	Mastering of Hepatobiliary, Gastrointestinal, Endocrine surgeon specific tests (chest x ray, surgical CT, MRI etc)	
6	Participate in daily conference over 20 times	

o Training Lecture Plan

Contents	Academic adviser
Refresher Course Lectures 1. Management of the SRG, case - 1 2. Management of the SRG, case - 2 3. Delirium and Cognitive Dysfunction in the Perioperation Period 4. Awareness and memory during general anesthesia 5. Management of Postoperation pain	000

3. Personnel Information

o Professor

	Department	Surgery	Specialty	Hepatobiliary, Gastrointestinal, Endocrine surgery, Gallstones, blood vessels, liver
000 (M.D., Ph.D.)	Education & Professional Activities			

○ Other Personnel

Name	Department name	Duties	Note
0	Surgery	Surgery	

4. Detailed Program Schedule

Days	Contents
Monday	<ul style="list-style-type: none"> - Attend morning conference - Introduction of surgery the department in Chungbuk National University Hospital - Visit operating room - Refresher Course Lectures
Tuesday	<ul style="list-style-type: none"> - Attend morning conference - Refresher Course Lectures - Visit operating room - Discussion: cases of pre-surgery examination
Wednesday	<ul style="list-style-type: none"> - Attend morning conference - Refresher Course Lectures - Visit operating room and Participate in SRG - Discussion: general management of peri-operative patients
Thursday	<ul style="list-style-type: none"> - Attend morning conference - Refresher Course Lectures - Visit operating room and Participate in SRG - Discussion: management of acute and critically ill patients in the intensive care unit
Friday	<ul style="list-style-type: none"> - Attend morning conference - Refresher Course Lectures - Visit operating room and Participate in SRG