## **Educational Concept**

of

# **Surgical Society**

of

UP





#### General informations, considerations:

#### Introduction

The PTE Surgical Society (PTESS) was founded in March 2018 with the intention to be the basis of student's intention for improving technical/surgical skills during their education. The PTESS have started to hold hand-on trainings journal clubs and lectures with invited speakers to gain scientific and technical knowledge of students.

The education in the University have several improvements in skill training in surgery, but there is stil lacking availability in continuous and gradual training for those with clinical surgical interest. The available courses and free-training sessions have limitations in the approved number of students. Since the foundation of PTESS it has been clarified that there is an increasing need even for increasing the number of available courses, hands-on trainings and the extended education system of surgery and surgery associated disciplines.

Thus, the work of the society is elemental, since it concentrate students of similar interest and makes a community with the students, on the other hand further management is needed for making the forming and increasing need for completion of the University's surgery -based education system.

#### Organogram of PTESS:

The board consists of

- a. The President (A member of surgical staff)
- b. Vice-President
- c. General Assistant
- d. Logistics & Events
- e. Treasurer
- f. Research representative
- g. Assistant 1
- h. Assistant 2
- (2) Members a. The members sign up on a semester basis and should all be students of PTE ÁOK
- (3) Affiliated Surgeons
- a. Surgical staff willing to supervise and mentor skills sessions
- b. Surgeons willing to give talks
- c. Surgeons willing to allow members of the society to assist or observe surgeries

- d. Surgical staff willing to supervise members of the society in research or thesis work through the Student Research Society (TTK)
- (4) A board member, excluding the president, retires from the mandate a. At the end of the academic year/the mandate b. After removal from the registry of students of the university for any reason c. Semester status set to passive d. By illegal action e. By written resignation f. By vote of no confidence g. By death

#### Main targets:

The main target is to give an opportunity to the students to individualised surgical training with training possibilities of increased number and of improved curriculum. These involves the following activities:

- To serve the basis of technical and scientific knowledge improvement for students.
- Enable availability for increasing number of students.
- Increasing the availability of training in different surgical areas, skill training types.
- Log-book based documentation and collection of the performed trainings
- Making and performing objective assessment of skills. Continuous feedback to members about their training level.
- Develop "learners gap" and enable personalised skill training for individuals
- Feedback and assessment of skills giving a certificate after completion of different grades of training.
- Giving a creditability of the education hold by PTESS.

#### Potential advantages of PTESS:

With support of University there could be the possibility of surgical-based education and skill-based training during graduation of students. There could be possibility for giving the students an extra curriculum in the University. Furthermore, there is the possibility for giving a "diploma" or certificate about the skill training-based education which is based on assessment of different surgical skills and controlling of log-book.

With that method UP can start a unique process in educational process highlighting the importance of manual skills and individualisation of training.

#### General activities to reach the target:

<u>Lectures:</u> Invited speakers hold classic lecture about surgical based disciplines and surgical improvement. Eligibility criteria: membership

<u>Talk, board meeting:</u> The board members hold a meeting about arrangements and plans. Eligibility criteria: membership

<u>Journal Club</u> The society shall organize Journal Club sessions on a regular basis. The events are open for all and aim to be an arena for discussion and analysis of case series and/or research articles. The Journal Club also emphasizes critical thinking and evidence-based medicine and is meant as an aid for thesis preparation. Eligibility criteria: membership

<u>Gradual skill training</u>: The hand-on trainings, practical sessions are on the basis of gradual increase of technical challenging. Attendees can pass an exam / evaluation of skill and go to the next level thereafter.

<u>Individualised training</u>: Where we have the possibility to objectively evaluate attendees skills, students get a directed suggestion for more effective skill improvement.

<u>Assessment of skills:</u> Periodic examination of attendee's skills, objective evaluation and feedback of the present skills in a given area and assessing eligibility to jump the next step in gradual skill training system.

<u>General/basic surgical hands-on training</u>: knot tying, suturing methods, instruments and basic applications in surgery. Eligibility criteria: membership, but students before and after completed 3rd year are educated separately.

<u>Minimally invasive surgery hands-on training session</u>: starting with laparoscopy training, it can gradually involve even more challenging situations and simulations of procedures. Eligibility criteria: membership, after reaching given training sessions and completion of assessment in general basic surgical skills. Attendees can attend the next level after completed log book in the topic and evaluation of skills in previous level.

<u>Microsurgery hands-on training sessions</u>: Microsurgical skill training starting form basics and even more challenging situations. Eligibility criteria: membership, after reaching given training sessions and completion of assessment in general basic surgical skills. Attendees can attend the next level after completed log book in the topic and evaluation of skills in previous level.

<u>Vascular/ gastrointestinal training session</u>: Training for more complicated surgical skills, like bowel/ vascular sutures. Eligibility criteria: membership, after reaching given training sessions and completion of assessment in general basic surgical skills. Attended and log-booked general surgical session and first session of microsurgery.

<u>Wet lab training</u>: Realistic operative situation on living animals, mimicking different operative situations. Eligibility criteria: membership, assessment in general basic surgical skills and completion of all levels in general surgery and microsurgery.

<u>Practicing sessions / night sessions</u>: Attendees have the possibility to practice the learned suggestions repeatedly. These sessions are intended to be less instruction based but giving more options for self-training under demonstrator/instructor supervision. Eligibility criteria: membership, attended and log-booked session any of training possibilities listed above.

## The needs and terms of different activities:

	Planned place	Infrastucture	Disposables	No. of instructor / room/session	No. of demonst rator or technicia n / room/ session	Time of session	Estimate d costs (Ft)
Lecture	Lecture hall	-		Invited speaker		X 45 min	10.500
Board meeting	Seminary room	-				60 min	-
Journal club	Lecture hall	-	- Invited speaker			60 min	21.000
Basic surg. training	MSL	Simulators, instruments	sutures	2 2		4x 45 min	254,680
Night session	MSL	Simulators, instruments	sutures	To be discussed	1	2-3 x 45 min	155,660
Minimally invasive training	MSL/SOKI	Pelvi traines, Simulators, instruments	Sutures,	1	1	4x 45 min	295,640
Microsurgery training	SOKI	Microscopes, lupes, Simulators, instruments	Sutures, tubes, suturing objectives	1	1	2x 45 min	305,707
Vascular/GI training	MSL	lupes, Simulators, instruments. Specil simulators	Sutures, tubes, suturing objectives			4 x 45 min	327.420
Wet-lab	SOKI	Animal/cadaver operation theatre	Sutures, operation disposables	2	3	2 x 45 min	384,100

SOKI- Department of Surgical Research and Techniques

MSL- MediSkillsLab

### Feasibility study and cost evaluation

Here, there are three different scenarios for starting with and maintaining the PTESS activity. Scenario A represent the less and scenario C demonstrate the most effective but expensive solution.

		Scenario A	Scenario B	Scenario C	
	BS	5	3	2	
	NS		5	12	
Frequency of	MIS	5	5	8	
hands-on	MS		4	8	
	VS		4	6	
	WL		1	2	
Estimated cost/		2,75M	5,83M	9.92M	
semester					
Features		<ul> <li>2-3 sessions / member</li> <li>Limited education</li> <li>No microsurgery,</li> <li>No individualised education</li> </ul>	<ul> <li>For 50-60         attendees</li> <li>Versatile surgical skill education</li> <li>Loog-book</li> <li>Examnation</li> </ul>	<ul> <li>Attendees can reach the expected number (no waiting list)</li> <li>Individualised education</li> <li>Gradual, versatile surgical skill education</li> <li>Unique system in UP</li> </ul>	

#### Abbreviations:

BS	Basic surg.		
מם	training		
NS	Night session		
MIS	Minimally		
	invasive		
	training		
MS	Microsurgery		
	training		
VS	Vascular/GI		
	training		
WL	Wet-lab		

Balazs Gasz MD, PhD, FETCS associate professor president- Surgical Society

Shefali Sangani vice president