

CURRICULUM VITAE

3.1.2025

FULL NAME

SALMINEN, Taru Pipsa Paulina

DATE AND PLACE OF BIRTH

12 November 1970, Turku, Finland



POSITION ON THE DATE FOR CV

Sigrid Jusélius Professor of Surgery, University of Turku, Finland 1.9.2020 – 31.8.2025

Chief of Surgery (100%), Turku University Hospital, Turku, Finland: 1.10.2013 –

(20% 1.1.2019 – 31.8.2020, 30% 1.9.2020 – 31.8.2025)

Professor of Gastrointestinal Surgery, University of Turku, Turku, Finland: 1.8.2023 – (leave of absence 1.8.2023 – 31.8.2025)

Professor of Surgery, University of Turku, Finland: 1.1.2019 – (leave of absence 1.9.2020 – 31.8.2025)

PERSONAL DATA

NATIONALITY: Finnish

ADDRESS: Home: Leskenmäentie 13, 21250 Masku, Finland

Work: TYKS, Operative ward TG3A, PL 52, 20521 Turku, Finland

TELEPHONE: +358 40 718 1896

E-MAIL: paulina.salminen@tyks.fi, paulina.salminen@varha.fi

FAMILY: Married (1997), two children (1998, 2001)

EDUCATION AND TRAINING

High School Diploma, Benicia High School, California, USA 4.6.1988

Matriculation Examination, Nousiainen Gymnasium, Finland (grade laudatur 36/36) 31.5.1990

Bachelor of Medicine, University of Turku, Finland 1993

Licentiate of Medicine, MD, University of Turku, Finland 30.5.1997

Specialist in General Surgery, University of Turku, Finland 30.11.2004

Specialist in Gastrointestinal Surgery, University of Turku, Finland 31.5.2005

Doctor of Medical Sciences, PhD, University of Turku, Finland 27.6.2007

Docent in Gastrointestinal Surgery, University of Turku, Finland 18.10.2010

Administrative leadership in healthcare, University of Turku and
Turku School of Economics, Finland (30 ETCS points) 23.2.2011

Professor of Surgery, University of Turku, Finland 1.1.2019

Academic leadership in medical faculty course
Turku School of Economics, Finland 24.10.2019

University pedagogic education (25 ETCS points)
Faculty of Education, University of Turku, Finland 2.3.2021

LANGUAGE SKILLS

Finnish: native

English *: near native/fluent, matriculation examination (laudatur), gymnasium diploma (grade: 10)
Swedish *: excellent/very good command, matriculation examination (laudatur), gymnasium diploma (grade: 10), Official language examination (grade: good), Application for Professor of Surgery, Swedish speaking position, Helsinki University (2019): Swedish language qualification approved
German: basic communication skills
 *active regular use

PREVIOUS PROFESSIONAL APPOINTMENTS

<i>Professor of Surgery</i> , University of Turku, Satasairaala, Pori (100%)	1.5.2019 – leave of absence
<i>Chief of Surgery (30%)</i> , Satasairaala, Pori	1.5.2019 – 31.8.2020
<i>Chief of acute care surgery (20%)</i> , Turku University Hospital, Turku	1.5.2019 – 31.8.2020
Department of Digestive Surgery and Urology	
<i>Professor of Surgery (20%)</i> , University of Turku, Satasairaala, Pori (20%)	1.1.2019 – 30.4.2019
<i>Chief of acute care surgery (80%)</i> , Turku University Hospital, Turku	1.1.2019 – 30.4.2019
Department of Digestive Surgery and Urology	
<i>Chief of acute care surgery</i> , Turku University Hospital, Turku	1.10.2013 – 31.12.2018
Department of Digestive Surgery and Urology	
<i>Deputy Chief of Digestive Surgery</i> , Turku University Hospital, Turku	30.1.2013 – 30.9.2013
Department of Digestive Surgery and Urology	
<i>Deputy Chief of Emergency care</i> , Turku University Hospital, Turku	9.1. – 31.3.2012
Department of Joint Emergency Services, Varsinais-Suomi Hospital District	
<i>Chief of Emergency Care</i> , Turku University Hospital, Turku	1.4.2011 – 8.1.2012
Department of Acute and Emergency Care	
<i>Deputy Administrative Chief of Surgery</i> , Turku University Hospital, Turku	11.10.2010 – 31.3.2011
Department of Surgery	
<i>Specialist in gastrointestinal surgery</i> , Turku University Hospital, Turku	1.5.2009– 10.10.2010
Department of Surgery	1.4.2012 – 29.1.2013
<i>Deputy specialist in digestive surgery</i> , Turku University Hospital, Turku	9.1.2006 – 30.4.2009
Department of Surgery	
<i>Doctor in training in digestive surgery</i> , Turku University Hospital, Turku	1.6.2002 – 8.1.2006
Department of Surgery	
<i>Doctor in training</i> , Salo regional hospital, Salo	2.6.–3.8.1997
Department of Surgery	1.3.–31.12.1998
Maternity leave 30.7.1998–31.5.1999 and 3.5.2001–24.2.2002	1.6.1999 – 31.5.2002
<i>Doctor in training</i> , Loimaa regional hospital, Loimaa	3.9.1997–28.2.1998
Department of Surgery	
<i>Doctor in training</i> , Turku City Hospital, Surgery	12. – 16.4 1999
<i>Doctor in training</i> , Pöytyä Heath Care center, general medicine	13. – 24.5.1996
<i>Doctor in training</i> , Kemiö health care center, general medicine	1.7. – 4.8.1996

RESEARCH AWARDS, HONOURS AND MAJOR GRANTS AS PRIMARY APPLICANT

Research awards and honours

Member of the European Surgical Association (ESA)	May 2019
JAMA: Top Ten Articles of the decade 2010 – 2019 (APPAC trial 2015)	December 2019
<i>One in ten articles of the decade 2010 – 19: most important to clinical medicine and public health</i>	
American College of Surgeons (ACS) Honorary Fellowship (FACS Hon)	October 2022
International visiting professor New York Presbyterian Weill Cornell Medical Center	November 2023
Peruvian Society for Metabolic Bariatric Surgery, Honorary Member	February 2024
American Surgical Association (ASA) Honorary Fellowship	April 2024
American Society for Metabolic Bariatric Surgery: Mason lecture, San Diego, USA	June 2024

Major grants as primary applicant

European Research Council Consolidator Grant: APPAC IV	2024 – 2029	1.994 895€
Academy of Finland: APPAC IV	2023 – 2027	500.985€
Turku University: ERC grant application accepted for round II	2022, 2023	50.000€
Government Research Grant (EVO funding): APPAC IV Turku University Hospital	2021 – 2023	70.000€
Sigrid Jusélius foundation: Clinical Professorship	2020-2025	1.250 000€
Government Research Grant (EVO funding): PeriAPPAC-T Satakunta Central Hospital District	2020	20.750€
Government Research Grant (EVO funding): SLEEVEPASS	2019-2021	20.000€
Academy of Finland: APPAC II-III & MAPPAC	2018-2022	450.000€
Sigrid Jusélius foundation: APPAC II-III & MAPPAC	2018-2020	150.000€
Mary and Georg C. Ehrnrooth foundation: SLEEVEPASS 2018 Recommendation from Finnish Gastroenterology Research Foundation		30.000€
Mary and Georg C. Ehrnrooth foundation: MAPPAC 2017 Recommendation from Finnish Gastroenterology Research Foundation		30.000€
Mary and George C. Ehrnrooth foundation: APPAC III 2016 Recommendation from Finnish Gastroenterology Research Foundation		30.000€
Government Research Grant (EVO funding) Turku	2005 – 2017	85.000€
Multiple research grants during the years APPAC I – III, SLEEVEPASS, Surgical treatment of GERD	2017	
Turku University Research Grant: MAPPAC	2016	11.000€
Turku University Research Grant: APPAC II/III	2015	11.100€
Mary and Georg C. Ehrnrooth foundation: SLEEVEPASS 2012 Recommendation from Finnish Gastroenterology Research Foundation		15.000€
Orion Research Foundation: SLEEVEPASS	2009	10.000€
Total		4.728 730€

EDITORIAL BOARD MEMBERSHIPS

Scandinavian Journal of Surgery (SJS, IF 2.5)
Editor-in-Chief 2021 – ongoing
 Associate editor 2013 – 2021
 Editorial board member 2011 – 2013

JAMA Surgery (15.7, ranking 1. in the field of Surgery)
Editorial board member (international editorial board, 1/15 members) 2018 – ongoing

British Journal of Surgery (IF 8.6, ranking 3. in the field of Surgery)
 Editorial board member 2020 – 7/2023
Editor 8/2023 – ongoing

Surgery (IF 3.3)
 Editorial board member 2024 – ongoing

Lancet Gastroenterology and Hepatology (IF 30.9)
 Editorial board member 2016 – 2020

World Journal of Gastrointestinal Endoscopy (IF 1.4)
 Editorial board member 2010 – 2014

Textbooks: editor

Finnish textbook of Surgery: 2018, 2024 (*Editor-in-Chief* 2022 – 2024)
 Finnish textbook of Acute Care Surgery Emergency Room Guidebook: 2019, 2024 (*Editor-in-Chief* 2021 – 2024)

Finnish textbook of Gastroenterology, Hepatology and Digestive Surgery 2024 – ongoing
Journal special issue: editor

Scandinavian Journal of Surgery: Bariatric Surgery 2013
Duodecim: Bariatric Surgery (Lihavuuskirurgia) 2019
Scandinavian Journal of Surgery: Emergency Surgery 2021

MEMBERSHIPS IN SCIENTIFIC SOCIETIES

National level:

- *Board of The Finnish Surgical Society* 2012 – ongoing
 - Vice President of The Finnish Surgical Society 2015 – 2016
 - President of The Finnish Surgical Society 2016 – 2019
 - Member of the board (Scandinavian Journal of Surgery) 2019 – ongoing
- *Board of The Finnish Society of Gastroenterology* 2009 – 2016
 - Vice president of the Finnish Society of Gastroenterology 2012 – 2014
 - President of the Finnish Society of Gastroenterology 2014 – 2016
- *Board of The Finnish Digestive Surgeons* 2011 – 2015
 - President of The Finnish Digestive Surgeons 2012 – 2014
 - Vice President of The Finnish Digestive Surgeons 2015
- *Board of The Finnish Foundation for Surgical Progression (KES)* 2016 – 2022
 - Board member 2016 – 2018
 - Vice President 2018 – 2020
 - President 2020 – 2022
- *Board of Finnish Obesity and Metabolic Surgery Society (LIME)* 2008 – 2012, 2016– ongoing
 - Founding member, general secretary 2008 – 2012
 - Board member 2016 – 2017
 - Vice President of the Society 2018 – 2020
 - *President of the Finnish Obesity Surgery Society* 2020 – ongoing
- *Joint Continuous Medical Education committee* 2015 – ongoing
 - The Finnish Society of Gastroenterology and The Finnish Digestive Surgeons
- *Co-chairman of the committee of surgical education reform* 2019 – ongoing
 - National working group of professors of surgery (all 11 subspecialties of surgery), The Finnish Surgical Society, and The Finnish Foundation for Surgical Progression (KES)
 - Co-chairman with professor Pauli Puolakkainen, University of Helsinki
- *Co-chairman of the Finnish expert team of metabolic bariatric surgery for adolescents 2024 -*
 - Co-chairman professor of pediatric endocrinology Harri Niinikoski, University of Turku

International level:

- Honorary fellowship: American Surgical Association April 2024
- Honorary fellowship: American College of Surgeons (ACS) October 2022
- Member of the European Surgical Association (ESA) 2019 – ongoing
 - *ESA Council member* 2023 – ongoing
- International Federation of Surgery for Obesity and Metabolic Disorders (IFSO)
 - *European Chapter (IFSO-EC) Executive Board* 2021 – ongoing
 - *President Elect* 2023 – 2025
 - Multinational Advisory Group Member 2019 – 2022
 - Scientific Committee Member 2019 – 2021
 - World IFSO Executive Board Member 2021 – 2023
- *Scientific Committee of the Nordic and Baltic countries for Obesity Surgery*
 - *Representative of Finland* 2013 – ongoing

University level:

- Board member, Faculty of Medicine, University of Turku 1995 – 1997

- Alternate Board member, Faculty of Medicine, University of Turku 2022 – ongoing
- Committee of surgical training, University of Turku 2002 – 2007
- Board member, Clinical PhD-program, University of Turku 2020 – ongoing
- Board member, Evaluation and strategy of medical science, University of Turku 2020 – ongoing

Memberships in scientific societies:

The Finnish Surgical Society

The Finnish Digestive Surgeons

The Finnish Society of Gastroenterology

The Finnish Association of Physicians

The Finnish Medical Society Duodecim

International Federation of Surgery for Obesity and Metabolic Disorders (IFSO)

European Surgical Association (ESA)

American Surgical Association (ASA)

OTHER ACADEMIC AND PROFESSIONAL MERITS AND ACTIVITIES

Publications (please see publication list, 216 peer-reviewed publications, 124 book chapters)

- Original articles: 139
- Reviews in international journals: 6
- Reviews in domestic journals: 11
- Book chapters in international scientific books: 2
- Book chapters in domestic scientific books: 122
- Scientific domestic books edited: 4, ongoing 1
- Other peer-reviewed scientific publications (e.g., invited commentaries, editorials, letters) in international and domestic journals: 60
- h-index: 52 (Google Scholar), Citations: 9748 (Google Scholar)
- Submitted manuscripts: 8
- Manuscripts in preparation: 14

Publications on (*recent scientific interests*):

- ***Acute appendicitis*** (surgical and conservative treatment, uncomplicated and complicated acute appendicitis, diagnostics and imaging, translational microbiology and immunology research)
- ***Bariatric surgery*** (surgical procedures bypass and sleeve, improvement of diabetes, translational PET-studies on bariatric surgery alterations on different organs and tissues)
- The surgical treatment of GERD (including thesis)
- Endoscopic procedures (ERCP, the use of stents, endoscopic therapy for fistulas)
- Bile duct injuries, laparoscopic cholecystectomy
- Postoperative adhesions
- Gastric cancer

Ongoing research projects (RCTs and major cohort studies)

As primary investigator

1. **SLEEVEPASS:** A multicenter randomized clinical trial in Finland – laparoscopic gastric bypass vs. laparoscopic sleeve gastrectomy in the treatment of morbid obesity. Study initiated in 2008, active trial. ClinicalTrials #NCT00793143.
 - SLEEVEPASS:
 - 5-year results published in 2018 in JAMA (IF 63.1).

- The 5-year results have been combined with a similar Swiss randomized trial (SM-BOSS) data (PI Prof. Ralph Peterli, Basel) as an individual patient-data meta-analysis in order to add power in assessing outcomes and to evaluate possible predictive factors for better outcomes for each procedure. Merged data results published in 2021 in BJS (IF 8.6) 2021. Merged data was used for creating a postoperative outcome score (SF-BARI Score) to have a standardized and uniform criteria for assessing surgical outcomes, accepted for publication in September 2023 in JAMA Surgery (IF 15.7).
 - 7-year outcomes focusing on weight loss and QOL published in JAMA Surgery (IF 15.7).
 - 10-year follow-up article focusing on weight loss, remission of comorbidities and specifically gastroesophageal reflux and Barrett's esofagus published in 2022 in JAMA Surgery (IF 15.7).
 - PhD students: Ilmari Saarinen, MD, dissertation in fall 2025
 - Post doc researcher (after PhD supervision): Mika Helmiö, MD, PhD, Sofia Grönroos, MD, PhD
- SLEEVEPET:
- Co-PI with professor Pirjo Nuutila
 - PET-scan studies on bariatric surgery patients regarding the effect of bariatric surgery on various organs, e.g., brain, liver, and adipose tissue.
 - Four PET-trials with 31 published articles during 2012 – 23 (out of which 10 during years 2019 – 2023).
2. **APPAC:** A national multicenter randomized clinical trial – appendectomy vs. antibiotic treatment of acute appendicitis. Study initiated in 2009, active trial. ClinicalTrials #NCT01022567.
- APPAC 1-year follow-up results (primary endpoint) were published in 2015 in JAMA (IF 63.1); Top Ten Articles of the decade 2010 – 2019: One in ten articles of the decade 2010 – 19: most important to clinical medicine and public health.
 - APPAC 5-year follow-up results were published in 2018 in JAMA (IF 63.1)
 - APPAC 1-year cost analysis results were published in 2017 in the BJS (IF 8.6) and the 5-year cost analysis results were published in 2019 (Plos ONE IF 2.9).
 - APPAC 7-year quality of life results were published in 2020 in JAMA Surgery (IF 15.7).
 - 10-year follow-up visits have been completed in summer 2023 with all of the antibiotic patients with an intact appendix undergoing MRI according to revised protocol with ethical approval amendment (August 2019) and the data has been analyzed and will be submitted for peer-review in early 2025.
 - Ongoing PhD students: Roosa Salminen, medical student (dissertation in 2026)
3. **Peri-APPAC:** A national multicenter randomized study in the treatment of periappendicular abscess after the acute phase: a randomized clinical trial interval appendectomy vs. follow-up MRI. Study initiated in 2013, enrollment was prematurely terminated due to a high incidence of appendiceal tumors in 2016. ClinicalTrials #NCT02533869.
- The primary endpoint results were published in 2018 in JAMA Surgery (IF 15.7).
 - All of the available patients with an intact appendic have undergone a 5-year follow-up MRI and these results were published in September 2023 in Scandinavian Journal of Surgery (IF 2.5).
 - PhD students: Jari Mällinen, MD (dissertation October 25th, 2019), Roosa Salminen, medical student, University of Oulu, Finland (dissertation in 2025)
4. **APPAC II:** Randomized multicenter clinical trial. Optimizing the antibiotic treatment of uncomplicated acute appendicitis: i.v. + p.o. antibiotics vs. p.o. antibiotics. ClinicalTrials #NCT03236961. Study active.
- The 1-year results (primary outcome) were published in 2021 in JAMA (IF 120.7).

- Predefined analysis of prognostic factors for primary nonresponsiveness were published in 2022 in JAMA Surgery (IF 16.9).
 - Ongoing PhD students: Sami Sula, MD, and Liisa Selänne, MD (post doc researcher Jussi Haijanen as assistant thesis supervisor).
 - Post doc researchers (after PhD supervision): Jussi Haijanen, MD, PhD, and Suvi Sippola, MD, PhD
5. **APPAC III:** Randomized double-blind placebo-controlled multicenter clinical trial. Antibiotic therapy vs. placebo in the treatment of acute uncomplicated appendicitis. ClinicalTrials #NCT03234296. Study active.
- PhD student 3-year follow-up: Sami Sula, MD
 - Post doc researchers: Jussi Haijanen, MD, PhD.
6. **MAPPAC:** Prospective cohort study. Acute appendicitis – appendiceal and gut microbiota, etiology and effects of the antimicrobial treatment. ClinicalTrials #NCT03257423. Study active.
- PhD Students Sanja Vanhatalo, MSc (dissertation 6.6.2025), Tatu Han, MD (dissertation 2026), Annaleena Pakarinen, MD (dissertation 2027), and Tanja Orpana, medical student (dissertation 2027).
7. **APPTUX:** Retrospective cohort study. Appendiceal tumors – incidence, natural history, clinical relevance and prognosis.
- Large population based registry study, two published articles (2018, PhD student Elina Lietzén and 2022, PhD student Jenny Alajääski).
 - All of the histopathological specimens will be reassessed by experienced pathologist during 2024, the data will be analyzed and submitted for peer review in 2025.
 - PhD students: Jenny Alajääski, MD (post doc researcher Elina Lietzén as assistant thesis supervisor) and Casey Odei, MD (assistant supervisor prof. Tuomo Rantanen, University of Kuopio, Finland)
 - Post doc researchers (after PhD supervision): Elina Lietzén, MD, PhD
8. **PeriAPPAC-T:** Prospective national cohort study assessing appendiceal tumor prevalence in all consecutive patients with a periappendicular abscess.
- Prospective national cohort assessing appendiceal tumor risk associated with periappendicular abscess, please see the prematurely terminated Peri-APPAC RCT.
 - Study will be conducted with the applicant's APPAC-research group, participating hospitals: Turku and Pori, Oulu, Tampere, Kuopio, Jyväskylä, Mikkeli, Lahti, Seinäjoki, Joensuu, Rovaniemi and Vaasa.
 - The study was initiated in December 2020 and all consecutive patients presenting with a periappendicular abscess were enrolled for two years up to December 2022 including the data on all 3500 consecutive patients with appendicitis.
 - The manuscript is currently under peer-review and revision.
 - PhD students: Roosa Salminen, medical student (dissertation 2026) and Jenny Alajääski, MD (dissertation 2026).
9. **APPAC IV**
- Randomized doubleblind multicenter trial (nine centers in Finland): per oral antibiotics vs. placebo in the outpatient treatment of CT-confirmed uncomplicated acute appendicitis.
 - Trial protocol has been accepted by EU CTIS and registered in ClinicalTrials.gov (NCT06210369).
 - Patient enrollment (power calculation n=498) initiated in February 2024 and it is evaluated to take 2-3 years, primary endpoint of treatment success will be assessed at 30 days.

- The trial aim is to assess the role of antibiotics and also hospitalization in the treatment of uncomplicated acute appendicitis as according to the study hypothesis, both of these could be significantly decreased or even omitted having a major impact on the treatment paradigm of this common surgical emergency resulting in vast cost and health care cost savings.
- The trial will involve a large translational study MAPPAC II assessing the effects of antibiotics and placebo on gut microbiota and antibiotic resistance.
- PhD students: Heidi Maironen, MD (post doc researcher Jussi Haijanen as assisiting thesis supervisor), Saku Suominen, medical student (assistant supervisors prof. Mika Kortelainen and post doc researcher Jussi Haijanen)
- Post doc researcher: Jussi Haijanen, MD, PhD
- Funding: Academy of Finland 2023 -2027: 500.985€, European Research Council, ERC, 2024 – 2029, 1.994 895€, University of Turku grant for the internal support 75.000€.

10. **APPSYP** (co-senior advisor / co-PI, University of Helsinki prof. Mikko Pakarinen and Janne Suominen, MD, PhD)

- Randomized clinical trial appendectomy vs. symptomatic treatment in imaging confirmed uncomplicated acute appendicitis
- Trial intiated in June 2023, all five university hospitals pediatric surgery departments in Finland

International scientific collaboration as PI in Finland

- SLEEVEPASS and SM-BOSS RCT merged data, please see above, joint PI with prof. Ralph Peterli, Claraunis University, Basel, Switzerland
 - PhD students Saija Hurme, MSc, Sofia Grönroos, MD, Ilmari Saarinen, MD
- SLIM trial (Different limb lengths in gastric bypass surgery), Finnish PI (PI prof. Ralph Peterli, Basel, Switzerland)
 - post doc researcher Mika Helmiö
- FLAMES RCT FLAMES: Fibrosis Lessens After Metabolic Surgery, Finnish PI (PI prof. Ali Aminian, Cleveland, Ohio, US)
 - post doc researcher Kimmo Salminen, MD, PhD (gastroenterology and Hepatology)

PhD Student supervision (8 completed, 17 ongoing)

Completed PhD supervisions

1. Hanna Vihervaara, MD, Endoscopic biliary procedures: Studies on cannulation and stenting, dissertation 25.1.2013, University of Turku
 - Post-doc research projects under applicant's supervision: perioperative chemotherapy in gastric cancer with PET-scan response evaluation and acute cholecystitis
2. Elina Lietzén, MD, APPAC and APPTUX, dissertation 1.3.2019, University of Turku
 - Post-doc research projects under applicant's supervision: APPTUX, Peri-APPAC-T (co-supervisor of thesis / Jenny Alajääski, MD), and upcoming APPAC IV
3. Jari Mällinen, MD, PeriAPPAC, dissertation 25.10.2019, University of Oulu. Joined supervision with University of Oulu (Professor Tero Rautio and Professor Jyrki Mäkelä).
4. Mika Helmiö, MD, SLEEVEPASS, dissertation 31.1.2020, University of Turku
 - Post-doc research projects under applicant's supervision: SLEEVEPASS 10-year follow-up and international randomized SLIM-trial
5. Suvi Sippola, MD, APPAC, OPTICAP and APPAC II, dissertation 20.8.2021, University of Turku
 - *Best medical and surgical thesis of the year in 2021 in Finland*
 - Post-doc research projects under applicant's supervision: MAPPAC, APPAC IV
6. Jussi Haijanen, MD, APPAC and APPAC II, dissertation 4.3.2022, University of Turku
 - *Best surgical thesis of the year 2022 in Finland*

- Post-doc research projects under applicant's supervision: APPAC III, international collaboration IPDMA, MAPPAC, upcoming APPAC IV
7. Sofia Grönroos, SLEEVEPASS, dissertation 1.12.2023, University of Turku
 - Best surgical thesis of the year 2023
 - Post doc research under applicant's supervision: SLEEVEPASS genetics, SF-BARI Score
 8. Jochem Scheijmans, Acute appendicitis, dissertation 12.4.2024, University of Amsterdam. Co-supervisor, joined supervision with Professor Marja Boermeester, University of Amsterdam.

Ongoing PhD supervisions (registered, applicant main supervisor except for #9, #10, #15, and #16)

1. Sanja Vanhatalo, MSc, biosciences, MAPPAC, dissertation 6.6.2025, University of Turku. Translational supervision with adj. prof. Antti Hakanen, MD, PhD, and Eveliina Munukka, MSc, PhD, Department of Microbiology and Immunology, University of Turku
 - Post-doc research projects already ongoing under applicant's supervision: appendicoliths, appendiceal microbiome, and appendicitis immunology.
2. Saija Hurme, MSc, biostatistics, SLEEVEPASS + SM-BOSS, evaluated dissertation early 2026, University of Turku, assistant supervisor prof. Kari Auranen, Department of Biostatistics, University of Turku
 - Post-doc research already ongoing under applicant's supervision: study group statistician
3. Casey Odei, APPTUX, project initiated in November 2018, University of Turku, evaluated dissertation 2026, assistant supervisor prof. Tuomo Rantanen, University of Kuopio.
4. Sami Sula, MD, APPAC II and MAPPAC, project initiated in August 2019, University of Turku, evaluated dissertation November / December 2025.
 - Post doc research already ongoing under applicant's supervision: INCARO trial
5. Tatu Han, Medical student, MAPPAC, project initiated in September 2018, evaluated dissertation 2024. Translational joined supervision with microbiology and immunology adj. prof. Antti Hakanen, MD, PhD, and docent Maija Hollmén, MSc, PhD, University of Turku.
6. Ilmari Saarinen, MD, SLEEVEPASS, project initiated in August 2019, University of Turku, evaluated dissertation September/October 2025, assistant supervisor Marjatta Strandberg, MD, PhD.
7. Jenny Alajääski, MD, PeriAPPAC-T, project initiated in November 2019, University of Turku and Satakunta Central Hospital, Pori, evaluated dissertation 2026, assistant supervisor Elina Lietzén, MD, PhD.
8. Liisa Setälä, MD, APPAC I-III Long-term outcomes and appendicitis recurrence, project initiated in spring 2021, University of Turku, evaluated dissertation 2026, assistant supervisor Jussi Haijanen, MD, PhD.
9. Annaleena Ollila, MD, MAPPAC, project initiated in spring 2021, evaluated dissertation in 2026, University of Turku, joint supervision with adj. prof. Antti Hakanen, MD, PhD, Department of Microbiology and Immunology, University of Turku
10. Roosa Salminen, medical student, Peri-APPAC, APPAC, Peri-APPAC-T, project initiated in 2021, evaluated dissertation in spring 2026, University of Oulu, joined supervision with prof. Tero Rautio, Department of Surgery, University of Oulu
11. Viiko Vahtera, MD, The impact of bariatric surgery on biological and behavioral risk factors for cardiovascular diseases, project initiated in 2022, evaluated dissertation 2026, assistant supervisor prof. Sari Stenholm, Department of Public Health and Epidemiology, University of Turku.
12. Heidi Maironen, MD, APPAC IV, project initiated in 2022, evaluated dissertation in 2027, University of Turku. Assistant supervisor Jussi Haijanen, MD, PhD.
13. Saku Suominen, medical student, APPAC IV, project initiated in 2022, evaluated dissertation in 2027, University of Turku. Assistant supervisors prof. Mika Kortelainen, Health Economics, University of Turku, Jussi Haijanen, MD, PhD.
14. Tanja Orpana, medical student, MAPPAC, project initiated in 2023, evaluated dissertation in 2027, University of Turku. Assistant supervisors Antti Hakanen, MD, PhD and Sanja Vanhatalo,

MSc.

15. Hiske Huisman, Acute appendicitis, project initiated in 2024, evaluated dissertation in 2027, University of Amsterdam. Co-supervisor, joined supervision with Professor Marja Boermeester, University of Amsterdam.
16. Janina Heiskanen, MSc, MAPPAC II, project initiated in May 2024, evaluated dissertation in 2028, University of Turku, joint supervision with adj. prof. Antti Hakanen, MD, PhD, Department of Microbiology and Immunology, University of Turku.
17. Vilhelm Suksi, MSc, Gut microbiome as a mediator of inflammation and host response in acute appendicitis, project (ImmuDocs) initiated in November 2024, evaluated dissertation 2028, joint supervision with prof. Leo Lahti, Department of Computing, Faculty of Technology, University of Turku, and adj. prof. Eveliina Munukka, Department of Microbiology and Immunology, University of Turku.

Examiner for thesis

1. Hanna Lampela, University of Helsinki – Biliary atresia: Treatment results and native liver function, dissertation 1.3.2013
2. Tuuli Kauttu, University of Helsinki University – Esophageal Adenocarcinoma: Pathogenesis, prevention and prognosis, dissertation 9.6.2017
3. Topi Luoto, University of Helsinki –Pediatric Onset Portal Hypertension – Surgical Treatment and Outcomes, dissertation 15.11.2019
4. Aaro Kasurinen, University of Helsinki – Prognostic value of inflammation- related biomarkers in gastric cancer, dissertation 8.5.2020

Reviewer for associate professorship (docent)

1. Jaana Vironen, Digestive surgery, August 2014, University of Helsinki
2. Laura Renkonen-Sinisalo, Digestive surgery, March 2018, University of Helsinki
3. Toni Seppälä, Experimental surgery, November 2019, University of Helsinki

Dissertation opponent

Due to extensive national scientific collaboration, the opportunities to act as a dissertation opponent in Finland is very limited.

1. Alli Laitinen, MD, Biomarkers in gastric cancer, December 2018, University of Helsinki
2. Elizabeth de Wijkerslooth, MD, Improving efficiency in the surgical treatment of acute appendicitis, June 2023, Erasmus University, Rotterdam, the Netherlands.
3. Edgar Lipping, MD, Postoperative antibacterial therapy in complicated appendicitis and appendectomy in pregnancy, March 2024, Tartu, Estonia
4. Kristina Spetz, clinical pharmacist, Adherence to vitamin and mineral supplementation after metabolic bariatric surgery, November 2024, Linköping University, Sweden

International scientific duties

Reviewer for full professorship

1. Professor of Surgery, Lund University, Sweden, 2021
2. Professor of Bariatric Surgery, Karolinska Institutet, Stockholm, Sweden, 2021
3. Professor of Surgery, Umeå University, Sweden, 2022

Congress scientific committee and faculty

1. Faculty of the International Surgical Week 2013 in Helsinki with the domestic responsibility of the gastric cancer sessions.
2. Faculty of International Scientific Committee of the International Gastric Cancer Congress, IGCC, (Sao Paulo, Brazil 2015 and Beijing, China, 2017).
3. Faculty of International Federation of Surgery for Obesity and Metabolic Disorders European Chapter, IFSO-EC: Naples 2017, Athens 2018, Lyon 2019, Prague 2022, Zürich 2023, Vienna 2024, Venice 2025

4. Faculty and scientific committee (SC) member of International Federation of Surgery for Obesity and Metabolic Disorders, IFSO: Madrid 2019, Miami 2022, Naples 2023 (SC), Melbourne 2024 (SC), Santiago 2025 (SC)

Other scientific duties and international collaboration

- Data safety monitoring board: Swedish BEST-study (Multicenter RCT: sleeve vs. bypass, PI professor Torsten Olbers, Sweden), chair of the committee, other members prof. Michel Gagner, Canada and prof. Ralph Peterli, Switzerland.
- Uppsala University: Invited member of the KOF17-review Uppsala University evaluation team, Surgical Sciences, Uppsala 15.-19.5.2017.
- Örebro University: Invited member of the ORU2021-review Örebro University Evaluation team, Surgical Sciences, Medicine and Biomedicine, Örebro (via Zoom) 19.-23.4.2021
- Data safety monitoring board: MAGNET-study, GT Metabolic Solutions (PI prof. Michel Gagner)
- Study group member: SAS trial (The Scoring system of Appendicitis Severity), PI prof. Marja Boermeester, University of Amsterdam
- Study group consultant for a Dutch RCT: ACCOUNT trial (antibiotic therapy vs. laparoscopic appendectomy for adults with uncomplicated appendicitis), PIs prof. Camiel Rosman, Radboud Institute for Health Sciences and prof. Marja Boermeester, University of Amsterdam
- Trial advisory board, TRIAD trial, US: PI David Flum, University of Seattle, Washington, USA

Peer evaluation of funding applications

- Dutch Digestive Foundation – Diagnosis of Digestive Diseases 2017
- NIH (National Institute of Health, US) 2018
- German Cancer Research 2023

Reviewer for journals

1. New England Journal of Medicine
2. The LANCET
3. JAMA
4. British Medical Journal
5. Annals of Internal Medicine
6. LANCET Diabetology and Endocrinology
7. LANCET Gastroenterology and Hepatology
8. PLOS Medicine
9. JAMA Pediatrics
10. JAMA Surgery
11. Annals of Surgery
12. Gastrointestinal Endoscopy
13. British Journal of Surgery
14. Annals of Medicine
15. International Journal of Obesity
16. Surgery on Obesity and Related Disorders (SOARD)
17. Obesity Surgery
18. Surgery
19. World Journal of Surgery
20. Plos One
21. BMJ Open
22. Diseases of the Esophagus
23. APMIS (Acta Pathologica et Microbiologica Scandinavica)
24. Scandinavian Journal of Gastroenterology
25. Journal of Pediatric Surgery
26. European Journal of Trauma and Emergency Surgery
27. BMC Surgery

28. Scandinavian Journal of Surgery
29. Duodecim and Finnish Medical Journal

Invited lectures

Domestic level

Numerous invited lectures and organized meetings throughout the years 2007 – 2022, please see scientific societies and organized national meetings.

International level

Invited lectures on bariatric surgery

1. Stockholm Obesity Days, Stockholm, Sweden, May 2012
2. Surgical Week Sleeve Symposium, Uppsala, Sweden, September 2013
3. 2nd Nordic Bariatric Meeting, Uppsala, Sweden, April 2014
4. 4th Nordic and Baltic Bariatric Surgery Meeting, Reykjavik, Iceland, March 2017
5. International Gastric Cancer Congress, Beijing, China, April 2017
6. International Federation of Surgery for Obesity and Metabolic Disorders European Chapter, IFSO-EC, Naples, Italy, May 2017
7. World Congress of Surgery, Basel, Switzerland, August 2017
8. IFSO-EC, Athens, Greece, May 2018
9. Bariatric Surgery Masterclass, Montpellier, France, June 2018
10. Grand Surgical Round lecture, Seoul National University Hospital, South Korea, September 2018
11. International Congress on Obesity and Metabolic Syndrome in conjunction with Korean Society for the Study of Obesity (ICOMES), Seoul, Korea, September 2018
12. Swiss Society for Bariatric and Metabolic Surgery, Thun, Switzerland, November 2018
13. British Obesity and Metabolic Surgery Society, Belfast, Ireland, January 2019
14. 5th Nordic and Baltic Bariatric Meeting, Copenhagen, Denmark, March 2019
15. Davos laparoscopy training course on advanced bariatric surgery, Instructor, Switzerland, April 2019
16. Grand Surgical Round lecture, SLEEVEPASS, Zürich University Hospital, Switzerland, May 2019
17. United Gastroenterology Week (UEGW), Barcelona, Spain, 2019
18. British Obesity and Metabolic Surgery Society, Aberdeen, UK, January 2020
19. Davos laparoscopy training course on advanced bariatric surgery, Instructor, Switzerland, April 2020
20. IFSO-EC, Prague, Czech Republic, May 2020 > November 2021 (COVID-19)
21. Controversies in Bariatric Surgery 2020, St. Petersburg, June 2020 > Web-congress (COVID-19)
22. BEST congress 2020, Tips and Tricks in Bariatric Surgery, Montpellier, France, September 2020 > Web-congress (COVID-19)
23. The 11th Frankfurter Meeting, Frankfurt, Germany, November 2020 > web-congress (COVID-19)
24. IFSO-EC and EASO 2022, Maastricht, the Netherlands, May 2022
25. 6th Nordic and Baltic Bariatric Meeting, Vilnius, Lithuania, March 2021 > June 2022 (COVID-19)
26. IFSO World 2022, Miami, USA, August 2022
27. Davos laparoscopy training course on advanced bariatric surgery, Instructor, Switzerland, September 2022
28. IFSO World Consensus meeting 2023, Hamburg, Germany, February, 2023
29. Davos laparoscopy training course on advanced bariatric surgery, Instructor, April 2023
30. IFSO-EC, Zürich, Switzerland, May 2023
31. EAES, Rome, Italy, June 2023
32. IFSO World 2023, Naples, Italy, August 2023
33. IFSO-LAC (Latin America chapter), Lima, Peru, February 2024
34. Davos laparoscopy training course on advanced bariatric surgery, Instructor, Switzerland, April 2024
35. IFSO World consensus meeting 2024: Obesity management medications within the context of metabolic bariatric surgery, Vienna, Austria May 2024

36. IFSO-EC, Vienna, Austria, May 2024
37. 7th Nordic and Baltic Bariatric Meeting, Turku, Finland / congress president, June 2024
38. ASMBS Mason lecture, San Diego, USA, June 2024
39. Grand Surgical Round lecture, Lausanne University Hospital, Lausanne, Switzerland, June 2024
40. IFSO World 2024, Melbourne, Australia, August 2024
41. United Gastroenterology Week (UEGW), Vienna, Austria, October 2024
42. Frankfurt Metabolic Bariatric Surgery meeting, Frankfurt, Germany, November 2024
43. IFSO consensus meeting 2025: Optimizing outcomes after sleeve gastrectomy: interventions and strategies, Mumbai, India, February 2025
44. IFSO Asia-Pacific Chapter meeting 2025, Mumbai, India, February 2025

Invited lectures on acute appendicitis

1. Grand Surgical Round lecture, Zürich University Hospital, Switzerland, May 2019
2. Surgical infection Society Europe (SIS-E), Madrid, Spain, June 2022
3. Grand Surgical Round lecture, Claraunis University, Basel, Switzerland, September 2023
4. American College of Surgeons, Boston, USA, October 2023
5. Grand Surgical Round, Weill-Cornell Medical Center, New York, USA, October 2023
6. Grand Surgical Round lecture, Lausanne University Hospital, Lausanne, Switzerland, June 2024
7. School of Surgery, University of Edinburgh, UK, November 2024

Invited lectures on scientific writing and peer-review

1. In person: Surgical infection Society Europe (SIS-E): Meet the editor, Madrid, Spain, June 2022
2. Webinar: Elsevier webinar of peer-review, June 2022
3. Webinar: Clinical trial design and conduct, University of Milan, November 2023
4. In person: Höstmötet, Norwegian Society of Surgery, Oslo, Norway. October 2024
5. In person: Clinical trial design and conduct, University of Milan, January 2025

Major webinar lectures: International Bariatric Club (IBC), IFSO European Chapter, Young IFSO Journal Club, European Association of Endoscopic Surgery (EAES), Grand Metabolic Round (Phil Schauer), Cleveland Clinic (Ali Aminian), The Peruvian Diabetes Association

Organizing national meetings, responsible for the scientific program and congress organization

- Annual Operative Days (approx. 1500 participants) as the President of The Finnish Surgical Society: 2017, 2018, and 2019
- Annual Digestive Days (approx. 350 participants) as the President of the Finnish Digestive Surgeons and The Finnish Society of Gastroenterology: 2012, 2013, 2014, 2015, and 2016
- Annual Gastroenterology Fall meeting (approx. 200 participants) as the president of the Finnish Society of Gastroenterology: 2014, 2015, and 2016
- Annual Surgical Society Spring meeting (approx. 150 participants) as a board member and President of the Finnish Surgical Society: 2015, 2016, 2017, 2018, 2019, and 2020
- 7th Nordic and Baltic Bariatric Meeting, Turku, Finland / congress president, June 2024

Supervision of undergraduate students

(Bachelor of medicine, graduate study, 16 finished, 1 ongoing):

1. Henna Ketamo, Abdominal compartment syndrome, 2008
2. Leena Mäkitalo, Bile duct injuries in the laparoscopic era, 2010
3. Veikko Nikulainen, Endoscopic treatment of leakage and fistulas with fibrin glue, 2011
4. Sara Valanto, Post-bariatric reconstructive plastic surgery, 2011
5. Antti Vuorinen, Perioperative chemotherapy in gastric cancer, 2012
6. Joonas Ikonen, APPAC, 2013
7. Auli Mela, SLEEVEPASS, 2015, (together with PhD student M. Helmiö)
8. Olli Nieminen, Perioperative chemotherapy in gastric cancer, PET-scan response evaluation, 2016 (together with post-doc researcher H. Vihervaara)

9. Vili Pouta, Perioperative chemotherapy in gastric cancer, PET-scan response evaluation, 2019 (together with post-doc researcher H. Vihervaara)
10. Tapani Strander, Open abdomen, 2018
11. Kirsi Niemi, APPTUX, 2020 (together with PhD student / post-doc researcher E. Lietzén)
12. Lauri Viinikainen, APPAC 7-y QOL (article), 2020 (together with PhD student S. Sippola)
13. Siiri Mäntyoja, APPAC II (article), 2022 (together with PhD student J. Haijanen)
14. Tatu Hahn, MAPPAC, 2022 (PhD student, part of the thesis)
15. Ville Mäkinen, Treatment of cholecystitis in the elderly, 2021 (together with post-doc researcher H. Vihervaara)
16. Risto Rapola, Appendicitis Snapshot, 2023, (together with post-doc researcher E. Lietzén)
17. Miska Kujala, prognostic factors for complicated acute appendicitis, initiated spring 2022 (together with PhD student Sami Sula), completion spring 2025
18. Riikka Savolainen, Metabolic Bariatric Surgery on Adolescents in Finland, initiated January 2025 (together with prof. of pediatric endocrinology Harri Niinikoski)

Scientific education

Since 2007 I have been the primary investigator (PI) and research group leader for two large national study groups conducting multiple randomized trials and prospective cohort studies, please see Ongoing research projects as primary investigator.

Initiating, running, maintaining, and facilitating large prospective multicenter trials is very challenging and time consuming. During these 15 years of being the PI in multiple clinical trials has taught me a great deal in both research leadership and management. These years have also provided me great education and familiarization in study designs, plans, data collection, and randomization, statistics, and study ethics. This vast experience both facilitates and enables the continuing prospective clinical research and management of both large multicenter trials and study groups. All of the initiated trials have been conducted as planned and based on this experience and track record, the work continues and the ongoing large randomized multicenter trial (APPAC IV) was initiated in February 2024.

The track record of both study groups led by the applicant as PI has also attracted and enabled vast international scientific collaboration further contributing to the scientific education and experience.

Special fields of interest in clinical work, active clinical work 2-3 workdays a week

- Metabolic bariatric surgery
- Acute care surgery (operative room on-call once a month)
- Upper gastrointestinal surgery

Special fields of interest in scientific work

- Metabolic bariatric surgery and obesity
- Acute appendicitis and the associated microbiota
- Surgical clinical randomized trials or prospective cohort studies with a specific clinical study aim directly applicable to clinical practice.
- Translational studies within or from the field of surgery to enhance understanding of the mechanisms related to surgically treated diseases.
- Research philosophy:
 - Clinical surgical research is based on co-operation and network of different hospitals.
 - Collaboration combined with thorough and well-planned study protocols results in high-class clinical research also by international standards.
 - Aim is to create a Finnish clinical surgical research culture promoting both national and international collaboration with an already existing successful track-record.

Contribution in the development of clinical work

Acute appendicitis and appendectomy is one of the most common surgical emergency operations globally. With the accurate differential diagnosis between uncomplicated and complicated acute appendicitis, based on the APPAC trial results the majority of the patients presenting with

uncomplicated acute appendicitis can be treated with antibiotics alone or even without antibiotics and potentially also as outpatient treatment. Non-operative treatment is associated with decreased morbidity and overall health care costs. The topic is under active research by the applicant's study group, vast international collaboration, and active global research, the century-old treatment paradigm of acute appendicitis may be changing in the near future. The initial individual patient data meta-analysis (IPDMA) comparing appendectomy and antibiotics with large international collaboration on an individual patient level was accepted for publication in October 2024. The APPAC IV doubleblind RCT comparing oral antibiotics vs. placebo will bridge the major knowledge gap of the role of antibiotics in the treatment of uncomplicated acute appendicitis. The global impact of this novel concept defines high risk-high gain research; changing the over century-old dogma of appendectomy for all appendicitis cases into current knowledge where the majority of patients with uncomplicated acute appendicitis can be treated with antibiotics alone or even symptomatic therapy avoiding unnecessary surgeries will result in major cost savings as the majority of appendicitis cases are uncomplicated.

Obesity is an ever increasing global epidemic. Laparoscopic gastric bypass is the gold standard, but in 2014 laparoscopic gastric sleeve became the most common bariatric procedure in the world without having long-term data results. The SLEEVEPASS trial is the largest RCT comparing these procedures with the longest follow-up having a major clinical impact on this vast surgical field. Publication of the 10-year results with excellent follow-up rate in 2022 in JAMA Surgery had a major impact on procedure selection and assessment of GERD related topics also including follow-up protocols incorporating a huge number of patients worldwide.

In addition, international scientific collaboration with the Swiss SM-BOSS trial further enhances the clinical relevance as the merged data of these two large RCTs has been used to create a standardized uniform outcome score applicable to real-life practice. The SF-BARI Score was published in JAMA Surgery in January 2024 and the score was validated in large national registries in the Netherlands, Sweden, and Norway and submitted for peer-review in JAMA Surgery in December 2024. With efficient implementation, the SF-BARI Score will significantly add to the standardized outcome assessment of metabolic bariatric surgery with the potential of also comparing the outcomes of anti-obesity medications and surgery.