

Curriculum vitae with track record Sabine Leh

Personal information

Family name, First name: Leh, Sabine
Date of birth: 08.05.1957
Sex: Female
Nationality: German
Researcher unique identifier: 0000-0002-0764-2941 (ORCID), E-6053-2011 (ResearcherID)
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Education

2012 PhD: Disputation date: 17.02.2012. The Faculty of Medicine and Dentistry, University of Bergen, Norway
1982 Master. Faculty of Medicine, University of Tübingen, Germany

Current and previous positions

2016 - Registry Pathologist at The Norwegian Renal Registry, Section for Renal Biopsy, Haukeland University Hospital, Bergen; 20%
2013 - Special Advisor at the Department of Research and Development, ICT section, Haukeland University Hospital, Bergen; 20%
2013 - Associate Professor at The Gade laboratory of Pathology, Department of Clinical Medicine I, University of Bergen, Norway; 50%/30%/20%
1997 - Consultant at the Department of Pathology, Haukeland University Hospital, Bergen, Norway; predominantly 50%
2002 - 2010 PhD student, Renal Research Group, Institute of Medicine, University of Bergen, Norway
1986 - 1997 Resident, Department of Pathology, Christian-Albrechts Universität Kiel, Germany

Career breaks

1982 - 1986 Family work

Project management experience

2020 - "Pathology services in the Western Norway Health Region, a centre for applied digitization", strategic research project (project leader)
2017 - "[Kidney Biopsy Codes](#)", international project (project leader team)
2016 - "[Digital pathology](#)", national concept study and project, Nasjonal IKT (participant)
2016 - "Digital pathology", ICT project, Western Norwegian Health Region (participant)
2016 - 2018 "Smart structured pathology reports", innovation project Haukeland University Hospital Bergen (project leader)
2010 - 2012 "Digitalization of Tissue Sections for The Norwegian Kidney Biopsy Registry" innovation project Haukeland University Hospital Bergen (project leader)

Supervision of students and research fellows

- 2019 - Nazanin Mola, PhD student, The Gade laboratory of Pathology, Department of Clinical Medicine I, University of Bergen
- 2018 - Ida Viken Stalund, PhD student, The Gade laboratory of Pathology, Department of Clinical Medicine I, University of Bergen
- 2016 - 2017 Angela Mwakimonga, Muhimbili University of Health and Allied Sciences, Tanzania, fellowship training funded by the International Society of Nephrology (ISN)

PhD thesis committees

- 2019 [Amit Suveer, Methods for Processing and Analysis of Biomedical TEM Images, University of Uppsala](#)

Teaching activities

Sabine has supervised research work of 2 students (MSc level).

- 2012 - Practical courses in post mortem examination and histopathology, lectures in pathology for medical students
The Gade Institute of Pathology, University of Bergen, Bergen
- 2002 - National courses for residents in pathology
Basic course of nephrology (2002, 2006, 2008, 2016, 2020)
Pediatric nephrology (2004, 2007, 2009, 2015)
Renal physiology and pathophysiology (2011, 2016)
Intestinal diseases (2012, 2014, 2020)
Something of significance in autopsy kidneys? National autopsy course (2016)
Digital pathology – in practice. Annual meeting course Norwegian Society of Pathology (2017)
- 2014 - Lectures in e-health
University of Bergen, Bergen, Norway
Smart use of information and communication technology for doctors (2014)
Digital pathology (2019)
- 2017 Precongress Course in Nephropathology
National Congress of Nephrology, Bucharest, Romania
- 2006 - 2013 Collaboration with NORAD's Programme for Master Studies for developing countries (NOMA) Sandwich programme for M.Med and MSc degrees in clinical medicine (2006–2013) between University in Bergen and Muhimbili University of Health and Allied Sciences Tanzania, Project-id: NOMAPRO-2006/10032
Individual on site teaching of renal pathology (5 residents, 2010-2013, 1 consultant 2014)

Organisation of scientific meetings

- 2018 Member of the Scientific Committee of the 5th Nordic Symposium on Digital Pathology, Helsinki, Finland
- 2013 Member of the organizational committee for the 4th Scandinavian TEM and Early Rectal Cancer Meeting, Bergen, Norway

Institutional responsibilities

- 2018 Dissertation committee, Israa Abdulrhman Ahmed (leader), The Faculty of Medicine and Dentistry, University of Bergen, Norway
- 2013 Dissertation committee, Nada Mohamed Suliman (leader), The Faculty of Medicine and Dentistry, University of Bergen, Norway

Commissions of trust

- 2016 - Registry pathologist and board member Norwegian Renal Registry

Membership of academies/scientific societies

- 2019 - American Society of Nephrology
- 2018 - Renal Pathology Society; Harmonized Coding Working Group
- 2017 - International Society of Nephrology
- 2012 - European Society of Pathology; Nephropathology Working Group
- 1997 - The Norwegian Pathology Association; Nephropathology and Gastrointestinal Pathology Working Group
- International Academy of Pathology, German Division

Track record

61. Paunas FTI, Finne K, **Leh S**, Osman TA, Marti HP, Berven F, Vikse BE. Characterization of glomerular extracellular matrix in IgA nephropathy by proteomic analysis of laser-captured microdissected glomeruli. *BMC Nephrol.* 2019 Nov 14;20(1):410.
- 60: Landolt L, Furriol J, Babickova J, Ahmed L, Eikrem Ø, Skogstrand T, Scherer A, Suliman S, **Leh S**, Lorens JB, Gausdal G, Marti HP, Osman T. AXL targeting reduces fibrosis development in experimental unilateral ureteral obstruction. *Physiol Rep.* 2019 May;7(10):e14091.
- 59: Becirovic-Agic M, Jönsson S, Tveitarås MK, Skogstrand T, Karlsen TV, Lidén Å, **Leh S**, Ericsson M, Nilsson SK, Reed RK, Hultström M. Time course of decompensation after angiotensin II and high-salt diet in Balb/CJ mice suggests pulmonary hypertension-induced cardiorenal syndrome. *Am J Physiol Regul Integr Comp Physiol.* 2019 May 1;316(5):R563-R570
- 58: Koch E, Finne K, Eikrem Ø, Landolt L, Beisland C, **Leh S**, Delaleu N, Granly M, Vikse BE, Osman T, Scherer A, Marti HP. Transcriptome-proteome integration of archival human renal cell carcinoma biopsies enables identification of molecular mechanisms. *Am J Physiol Renal Physiol.* 2019 May 1;316(5):F1053-F1067.
- 57: Jönsson S, Becirovic-Agic M, Isackson H, Tveitarås MK, Skogstrand T, Narfström F, Karlsen TV, Lidén Å, **Leh S**, Ericsson M, Nilsson SK, Reed RK, Hultström M. Angiotensin II and salt-induced decompensation in Balb/CJ mice is aggravated by fluid retention related to low oxidative stress. *Am J Physiol Renal Physiol.* 2019 May 1;316(5):F914-F933.
- 56: Hodneland E, Keilegavlen E, Hanson EA, Andersen E, Monssen JA, Rorvik JT, **Leh S**, Marti HP, Lundervold A, Svarstad E, Nordbotten JM. In vivo detection of chronic kidney disease using tissue deformation fields from dynamic MR imaging. *IEEE Trans Biomed Eng.* 2018 Nov 2. doi: 10.1109/TBME.2018.2879362. [Epub ahead of print]
- 55: Ruggajo P, **Leh S**, Svarstad E, Marti HP, Vikse BE. Low birth weight associates with glomerular area in young male IgA nephropathy patients. *BMC Nephrol.* 2018 Oct 22;19(1):287.
54. Nylund K, Sævik F, **Leh S**, Pfeffer F, Hausken T, Gilja OH. Interobserver Analysis of CEUS-Derived Perfusion in Fibrotic and Inflammatory Crohn's Disease. *Ultraschall Med.* 2018 Mar 14. doi: 10.1055/s-0044-100492. [Epub ahead of print]

53. Strauss P, Marti HP, Beisland C, Scherer A, Lysne V, **Leh S**, Flatberg A, Koch E, Beisvag V, Landolt L, Skogstrand T, Eikrem Ø. Expanding the Utilization of Formalin-Fixed, Paraffin-Embedded Archives: Feasibility of miR-Seq for Disease Exploration and Biomarker Development from Biopsies with Clear Cell Renal Cell Carcinoma. *Int J Mol Sci*. 2018 Mar 10;19(3).
52. Vikøren LA, Drotningvik A, Mwakimonga A, **Leh S**, Mellgren G, Gudbrandsen OA. Diets containing salmon fillet delay development of high blood pressure and hyperfusion damage in kidneys in obese Zucker fa/fa rats. *J Am Soc Hypertens*. 2018 Apr;12(4):294-302.
51. Knoop T, Vikse BE, Mwakimonga A, **Leh S**, Bjørneklett R. Long-term outcome in 145 patients with assumed benign immunoglobulin A nephropathy. *Nephrol Dial Transplant*. 2017 Nov 1;32(11):1841-1850.
50. Svarstad E, **Leh S**, Skrunes R, Kampevold Larsen K, Eikrem Ø, Tøndel C. Bedside Stereomicroscopy of Fabry Kidney Biopsies: An Easily Available Method for Diagnosis and Assessment of Sphingolipid Deposits. *Nephron*. 2017 Aug 26.
49. Paunas TIF, Finne K, **Leh S**, Marti HP, Mollnes TE, Berven F, Vikse BE. Glomerular abundance of complement proteins characterized by proteomic analysis of laser-captured microdissected glomeruli associates with progressive disease in IgA nephropathy. *Clin Proteomics*. 2017 Aug 14;14:30.
48. Vikøren LA, Drotningvik A, Bergseth MT, Mjøs SA, Mola N, **Leh S**, Mellgren G, Gudbrandsen OA. Effects of baked and raw salmon fillet on lipids and n-3 PUFAs in serum and tissues in Zucker fa/fa rats. *Food Nutr Res*. 2017 Jun 12;61(1)
47. Skrunes R, Tøndel C, **Leh S**, Larsen KK, Houge G, Davidsen ES, Hollak C, van Kuilenburg ABP, Vaz FM, Svarstad E. Long-Term Dose-Dependent Agalsidase Effects on Kidney Histology in Fabry Disease. *Clin J Am Soc Nephrol*. 2017 Jun 16.
46. Eikrem Ø, Skrunes R, Tøndel C, **Leh S**, Houge G, Svarstad E, Marti HP. Pathomechanisms of renal Fabry disease. *Cell Tissue Res*. 2017 Jul;369(1):53-62.
45. Macia MS, Halbritter J, Delous M, Bredrup C, Gutter A, Filhol E, Mellgren AE, **Leh S**, Bizet A, Braun DA, Gee HY, Silbermann F, Henry C, Krug P, Bole-Feysot C, Nitschké P, Joly D, Nicoud P, Paget A, Haugland H, Brackmann D, Ahmet N, Sandford R, Cengiz N, Knappskog PM, Boman H, Linghu B, Yang F, Oakeley EJ, Saint Mézard P, Sailer AW, Johansson S, Rødahl E, Saunier S, Hildebrandt F, Benmerah A. Mutations in MAPKBP1 Cause Juvenile or Late-Onset Cilia-Independent nephronophthisis. *Am J Hum Genet*. 2017 Jan 5. pii: S0002-9297(16)30535-3
44. Dale JE, Sebjørnsen S, **Leh S**, Rösler C, Aaserud S, Møller B, Fluge Ø, Erichsen C, Nadipour S, Kørner H, Pfeffer F, Dahl O. Multimodal therapy is feasible in elderly anal cancer patients. *Acta Oncol*. 2017 Jan;56(1):81-87
43. Eikrem OS, Strauss P, Beisland C, Scherer A, Landolt L, Flatberg A, **Leh S**, Beisvag V, Skogstrand T, Hjelle K, Shresta A, Marti HP. Development and confirmation of potential gene classifiers of human clear cell renal cell carcinoma using next-generation RNA sequencing. *Scand J Urol*. 2016 Dec;50(6):452-462.
42. Stanisavljević L, Myklebust MP, **Leh S**, Dahl O. LGR5 and CD133 as prognostic and predictive markers for fluoropyrimidine-based adjuvant chemotherapy in colorectal cancer. *Acta Oncol*. 2016 Dec;55(12):1425-1433
41. Ruggajo P, Svarstad E, **Leh S**, Marti HP, Reisæther AV, Vikse BE. Low Birth Weight and Risk of Progression to End Stage Renal Disease in IgA Nephropathy—A Retrospective Registry-Based Cohort Study. *PLoS One*. 2016 Apr 19;11(4)
40. Havre RF, **Leh SM**, Gilja OH, Ødegaard S, Waage JE, Baatrup G, Nesje LB. Differentiation of Metastatic and Non-Metastatic Mesenteric Lymph Nodes by Strain Elastography in Surgical Specimens. *Ultraschall Med*. 2016 Aug;37(4):366-372
39. Eikrem O, Beisland C, Hjelle K, Flatberg A, Scherer A, Landolt L, Skogstrand T, **Leh S**, Beisvag V, Marti HP. Transcriptome Sequencing (RNAseq) Enables Utilization of Formalin-Fixed, Paraffin-Embedded Biopsies with Clear Cell Renal Cell Carcinoma for Exploration of Disease Biology and Biomarker Development. *PLoS One*. 2016 Feb 22;11(2)

38. Kaur P, Bergrem A, Gerlyng P, Reims HM, **Leh S**, Valeur J. A methadone user with anaemia, skeletal pain and altered appearance. *Tidsskr Nor Laegeforen*. 2016 Jun 7;136(10):925-929
37. Skrunes R, Svarstad E, Kampevold Larsen K, Leh S, Tøndel C. Reaccumulation of globotriaosylceramide in podocytes after agalsidase dose reduction in young Fabry patients. *Nephrol Dial Transplant*. 2017 May 1;32(5):807-813
36. Kristoffersen AH, Bjånes TK, Jordal S, **Leh S**, Leh F, Svarstad E. Polyvinylpyrrolidone induced artefactual prolongation of activated partial thromboplastin times in intravenous drug users with renal failure. *J Thromb Haemost*. 2016 May;14(5):936-939
35. Finne K, Marti HP, **Leh S**, Skogstrand T, Vethe H, Tenstad O, Berven FS, Scherer A, Vikse BE. Proteomic Analysis of Minimally Damaged Renal Tubular Tissue from Two-Kidney-One-Clip Hypertensive Rats Demonstrates Extensive Changes Compared to Tissue from Controls. *Nephron*. 2016;132(1):70-80. doi: 10.1159/000442825. Epub 2016 Jan 9
34. Stanisavljević L, Aßmus J, Storli KE, **Leh SM**, Dahl O, Myklebust MP. CXCR4, CXCL12 and the relative CXCL12-CXCR4 expression as prognostic factors in colon cancer. *Tumour Biol*. 2015 Dec 17. [Epub ahead of print]
33. Tveitarås MK, Skogstrand T, **Leh S**, Helle F, Iversen BM, Chatziantoniou C, Reed RK, Hultström M. Matrix Metalloproteinase-2 Knockout and Heterozygote Mice Are Protected from Hydronephrosis and Kidney Fibrosis after Unilateral Ureteral Obstruction. *PLoS One*. 2015 Dec 16;10(12):e0143390
32. Haaskjold YL, Drotningvik A, **Leh S**, Marti HP, Svarstad E. Renal Failure due to Excessive Intake of Almonds in the Absence of Oxalobacter formigenes. *Am J Med*. 2015 Dec;128(12):e29-30
31. Waage JE, Rafaelsen SR, Borley NR, Havre RF, Gubberud ET, **Leh S**, Kolbro T, Hagen KK, Eide GE, Pfeffer F. Strain Elastography Evaluation of Rectal Tumors: Inter- and Intraobserver Reproducibility. *Ultraschall Med*. 2015 Dec;36(6):611-617
30. Knoop T, Vågane AM, Vikse BE, Svarstad E, Magnúsdóttir BT, **Leh S**, Varberg Reisæter A, Bjørneklett R. Addition of eGFR and Age Improves the Prognostic Absolute Renal Risk-Model in 1,134 Norwegian Patients with IgA Nephropathy. *Am J Nephrol*. 2015;41(3):210-9
29. Irgens HU, Fjeld K, Johansson BB, Ringdal M, Immervoll H, **Leh S**, Søvik O, Johansson S, Molven A, Njølstad PR. Glycogenin-2 is dispensable for liver glycogen synthesis and glucagon-stimulated glucose release. *J Clin Endocrinol Metab*. 2015 May;100(5):E767-75
28. Skogstrand T, **Leh S**, McClure J, Dashti M, Iversen BM, Graham D, McBride MW, Hultström M. Identification of a common molecular pathway in hypertensive renal damage: comparison of rat and human gene expression profiles. *J Hypertens*. 2015 Mar;33(3):584-96.
27. Waage JE, Bach SP, Pfeffer F, **Leh S**, Havre RF, Ødegaard S, Baatrup G. Combined endorectal ultrasonography and strain elastography for the staging of early rectal cancer. *Colorectal Dis*. 2015 Jan;17(1):50-6.
26. Finne K, Vethe H, Skogstrand T, **Leh S**, Dahl TD, Tenstad O, Berven FS, Reed RK, Vikse BE. Proteomic analysis of formalin-fixed paraffin-embedded glomeruli suggests depletion of glomerular filtration barrier proteins in two-kidney, one-clip hypertensive rats. *Nephrol Dial Transplant*. 2014 Dec;29(12):2217-27.
25. Waage JE, **Leh S**, Røsler C, Pfeffer F, Bach SP, Havre RF, Haldorsen IS, Ødegaard S, Baatrup G. Endorectal ultrasonography, strain elastography and MRI differentiation of rectal adenomas and adenocarcinomas. *Colorectal Dis*. 2015 Feb;17(2):124-31
24. Havre RF, **Leh S**, Gilja OH, Odegaard S, Waage JE, Baatrup G, Nesje LB. Strain Assessment in Surgically Resected Inflammatory and Neoplastic Bowel Lesions. *Ultraschall in der Medizin*. 2014 Apr;35(2):149-158.
23. Graham LA, Padmanabhan S, Fraser NJ, Kumar S, Bates JM, Raffi HS, Welsh P,

- Beattie W, Hao S, **Leh S**, Hultstrom M, Ferreri NR, Dominiczak AF, Graham D, McBride MW. Validation of uromodulin as a candidate gene for human essential hypertension. *Hypertension*. 2014 Mar;63(3):551-8.
22. Stanisavljević L, Søndena K, Storli KE, **Leh S**, Nesvik I, Gudlaugsson E, Bukholm I, Eide GE. The total number of lymph nodes in resected colon cancer specimens is affected by several factors but the lymph node ratio is independent of these. *APMIS*. 2014 Jun;122(6):490-8
21. Knoop T, Vikse BE, Svarstad E, **Leh S**, Reisæter AV, Bjørneklett R. Mortality in patients with IgA nephropathy. *Am J Kidney Dis*. 2013 Nov;62(5):883-90.
20. Nylund K, Jirik R, Mezl M, **Leh S**, Hausken T, Pfeffer F, Ødegaard S, Taxt T, Gilja OH. Quantitative contrast-enhanced ultrasound comparison between inflammatory and fibrotic lesions in patients with Crohn's disease. *Ultrasound Med Biol*. 2013 Jul;39(7):1197-206.
19. Skogstrand T, **Leh S**, Paliege A, Reed RK, Vikse BE, Bachmann S, Iversen BM Late, Hultström M. Arterial damage precedes the development of interstitial damage in the nonclipped kidney of two-kidney, one-clip hypertensive rats. *J Hypertens*. 2013 Jan;31(1):152-159.
18. Havre RF, **Leh S**, Gilja OH, Odegaard S, Waage JE, Baatrup G, Nesje LB. Strain Assessment in Surgically Resected Inflammatory and Neoplastic Bowel Lesions. *Ultraschall Med*. 2012 Nov 15. [Epub ahead of print]
17. Myklebust MP, Li Z, Tran TH, Rui H, Knudsen ES, Elsaleh H, Fluge Ø, Vonen B, Myrvold HE, **Leh S**, Tveit KM, Pestell RG, Dahl O. Expression of cyclin D1a and D1b as predictive factors for treatment response in colorectal cancer. *Br J Cancer*. 2012 Nov 6;107(10):1684-91.
16. Hultström M, **Leh S**, Paliege A, Bachmann S, Skogstrand T, Iversen BM. Collagen-binding proteins in age-dependent changes in renal collagen turnover: microarray analysis of mRNA expression. *Physiol Genomics*. 2012 May;44(10):576-86.
15. Norheim KB, **Leh S**, Gøransson L. Crescentic glomerulonephritis and microangiopathic haemolytic anaemia in a patient with established systemic sclerosis. *Scand J Urol Nephrol*. 2011 Dec;45(6):470-2.
14. Storli K, Søndena K, Furnes B, **Leh S**, Nesvik I, Bru T, Gudlaugsson E, Bukholm I, Norheim-Andersen S, Eide G. Improved lymph node harvest from resected colon cancer specimens did not cause upstaging from TNM stage II to III. *World J Surg*. 2011 Dec;35(12):2796-803.
13. Bredrup C, Saunier S, Oud MM, Fiskerstrand T, Hoischen A, Brackman D, **Leh SM**, Midtbø M, Filhol E, Bole-Feysot C, Nitschké P, Gilissen C, Haugen OH, Sanders JS, Stolte-Dijkstra I, Mans DA, Steenbergen EJ, Hamel BC, Maignon M, Pfundt R, Jeanpierre C, Boman H, Rødahl E, Veltman JA, Knappskog PM, Knoers NV, Roepman R, Arts HH. Ciliopathies with skeletal anomalies and renal insufficiency due to mutations in the IFT-A gene WDR19. *Am J Hum Genet*. 2011 Nov 11;89(5):634-43.
12. Waage JE, Havre RF, Odegaard S, **Leh S**, Eide GE, Baatrup G. Endorectal elastography in the evaluation of rectal tumours. *Colorectal Dis*. 2011 Oct;13(10):1130-7.
11. Brackman D, Sartz L, **Leh S**, Kristoffersson AC, Bjerre A, Tati R, Frémeaux-Bacchi V, Karpman D. Thrombotic microangiopathy mimicking membranoproliferative glomerulonephritis. *Nephrol Dial Transplant*. 2011 Oct;26(10):3399-403.
10. **Leh S**, Hultström M, Rosenberger C, Iversen BM. Afferent arteriopathy and glomerular collapse but not segmental sclerosis induce tubular atrophy in old spontaneously hypertensive rats. *Virchows Arch*. 2011 Jul;459(1):99-108.
- 9: Christiansen RE, Fiskerstrand T, **Leh S**, Haukanes BI, Singh AK, Fervenza FC, Svarstad E. A mother and daughter with unexplained renal failure. *Nephron Clin Pract*. 2011;119(1):c1-9, discussion c7-8.

8: Fiskerstrand T, Houge G, Sund S, Scheie D, **Leh S**, Boman H, Knappskog PM. Identification of a gene for renal-hepatic-pancreatic dysplasia by microarray-based homozygosity mapping. *J Mol Diagn*. 2010 Jan;12(1):125-31.

7: Hultström M, **Leh S**, Skogstrand T, Iversen BM. Upregulation of tissue inhibitor of metalloproteases-1 (TIMP-1) and procollagen-N-peptidase in hypertension-induced renal damage. *Nephrol Dial Transplant*. 2008 Mar;23(3):896-903.

6: Christiansen RE, Kolmannskog O, **Leh S**, Iversen BM, Tenstad O. Glomerular charge barrier and development of proteinuria in passive Heymann nephritis. *Kidney Blood Press Res*. 2008;31(3):203-9.

5: Nylund K, **Leh S**, Immervoll H, Matre K, Skarstein A, Hausken T, Gilja OH, Birger Nesje L, Ødegaard S. Crohn's disease: Comparison of in vitro ultrasonographic images and histology. *Scand J Gastroenterol*. 2008;43(6):719-26.

4: Gudbrandsen OA, Hultström M, **Leh S**, Monica Bivol L, Vågnes Ø, Berge RK, Iversen BM. Prevention of hypertension and organ damage in 2-kidney, 1-clip rats by tetradecylthioacetic acid. *Hypertension*. 2006 Sep;48(3):460-6.

3: **Leh S**, Vaagnes Ø, Margolin SB, Iversen BM, Forslund T. Pirfenidone and candesartan ameliorate morphological damage in mild chronic anti-GBM nephritis in rats. *Nephrol Dial Transplant*. 2005 Jan;20(1):71-82.

2: Christiansen RE, Tenstad O, **Leh S**, Iversen BM. Glomerular charge selectivity is impaired in hypertensive nephropathy. *Nephrol Dial Transplant*. 2004 May;19(5):1083-91.

1: Vaboe AL, **Leh S**, Forslund T. Interstitial nephritis, acute renal failure in a patient with non-fulminant hepatitis A infection. *Clin Nephrol*. 2002 Feb;57(2):149-53.

Abstracts

Mola, N. **Leh, S.** (2019). "Using deep neural network to count Ki-67 positive cells in neuroendocrine tumours of the gastrointestinal tract." *Virchows Archiv* 475: S124-S124.

Dendooven, A., Helbert, M., Peetermans, H., Nguyen, T., **Leh, S.** (2019). "Kidney biopsy codes for pathologists, status update." *Virchows Archiv* 475: S126-S126.

Dendooven, A., Peetermans, H., Helbert, M., Wiech, T., Hopfer, H., Amann, K., **Leh, S.,** (2018). "Kidney biopsy codes for pathologists: towards a generally applicable terminology and coding system." *Virchows Archiv* 473: S16-S16.

Becirovic-Agic, M., Jonsson, S., Tveitaras, MK., Skogstrand, T., Karlsen, TV., Liden, A., **Leh, S.,** Reed, RK., Hultstrom, M (2018). "BALB/cJBom Treated with Angiotensin II and High Salt Diet Develop Pulmonary Hypertension and Right Sided Heart Failure while C57BL/6J Mice do not." *Faseb Journal* 32(1).

Borge, H., Marti, H-P., **Leh, S.,** Skarstein, K. (2018). "Characterization of inflammatory cell infiltrate and potential survival niches of plasma cells in kidney biopsies of patients with Sjogren's syndrome." *Clin Exp Rheumatol* 36(3): S263-S263.

Leh, S., J. T. Valand, S. L. Bakke and M. Thierley (2016). "OpenEHR: Generating and maintaining information models for structured data in renal biopsy reporting." *Virchows Archiv* 469: S313-S313

Leh S, Leh F (2015): Ten reasons why I prefer digital slides in renal biopsy diagnostics. *Virchows Archive* 467 suppl 1: S34-S34, OFP-12-011

Gronseth H, Leh FJ, Bjanes TK, Ohldieck C, Svarstad E, **Leh SM** (2015): Polyvinylpyrrolidone storage disease in opioid addicted patients. *Virchows Archive* 467 suppl 1: S32-S33, OFP-12-004

Leh S, Leh F, Bjanes TK, Ohldieck C, Svarstad E (2014): An unusual cause of renal insufficiency: polyvinylpyrrolidone storage in opioid addicted patients. *Nephrology Dialysis Transplantation*, 59 suppl 3, MP370.

Børretzen A, Pfeffer F, **Leh S** (2013): Does GEWF solution improve lymph node harvest in colorectal cancer specimen with and without neoadjuvant chemotherapy? *Virchows Archive* 463: 210

Leh, S et al. (2013): A case of glomerular basement membrane lamellation associated with mutation in the MYO1E gene and not with Alport syndrome. *Virchows Archiv* 463: 131

Tveitaras MK, Skogstrand T, Helle F, **Leh,S.**; Reed,R.K.; Chatziantoniou,C.; Hultstrom,M. (2012) MMP2 deficient mice are protected from hydronephrosis after unilateral urethral obstruction. *Faseb Journal* 26, 868.12.

Jacobsen HK, Dicko A, Wang J, Storli K, **Leh S**, Thorsen FA, Pavlin T, Sondenaa K, Gullberg D, Bjerkvig R, Enger PY (2011) Separate analysis of the cancer and stroma cell populations from orthotopically implanted tumor biopsies in eGFP scid mice. *Clinical & Experimental Metastasis* 28:203

Hultström M, Skogstrand T, **Leh S**, Iversen BM (2010) Hypertensive Renal Damage Is Not Ageing: Evidence from Global Gene Expression in Rat Renal Cortex. *Journal of Hypertension* 28:E413

Pham KDC, **Leh S**, Havre RF, Engjom T (2010) Endoscopic submucosal dissection of early gastric cancer - video case. *Scandinavian Journal of Gastroenterology* 45:58

Leh S, Hultström M, Iversen B (2009) Development of tubular atrophy in old spontaneously hypertensive rats. *Virchows Archiv* 455:408

Skogstrand T, Hultström M, **Leh S**, Iversen BM (2007) Protein expression of factors involved in the development of renal interstitial fibrosis in old SHR. *Faseb Journal* 21:A899

Hultström M, **Leh S**, Iversen BM (2005) The distribution of growth factor expression in the renal cortex of SHR correlates with hypertensive damage, collagen expression and oxidative stress. *Faseb Journal* 19:A581

Leh S, Forslund T, Iversen BM (2003) Effect of candesartan and pirfenidone on morphological changes in chronic anti-glomerular basement membrane glomerulonephritis (anti-GBM GN) in rats. *Nephrol Dial Transplant*;18 Suppl 4:3-829

Forslund T, Vaagnes O, **Leh S**, Margolin SB, Iversen B (2003) Renal expression of mRNA for collagen type 1 alpha is corrected by candesartan cilexetil and pirfenidone in rats with anti-GBM-ab glomerulonephritis. *Journal of the American Society of Nephrology* 14:588A-589A

Forslund T, Fyhrquist F, **Leh S**, Iversen BM (2002) Antihypertensive effect of candesartan and pirfenidone in hypertensive rats with anti-GBM-ab glomerulonephritis. *Journal of Hypertension* 20:S46

Invited presentations

- 2020 "Digital renal pathology in clinical service: strengths and limitations", Short Course, 32nd Congress of the European Society of Pathology and XXXIII International Congress of the International Academy of Pathology, Glasgow (virtual), United Kingdom.
- 2020 "Kidney biopsy codes for pathologists, nephrologists and kidney biopsy registries", 4th International Renal Pathology Conference ONLINE, Warsaw, Poland.
- 2019 "Unexplained kidney disease – could it be Fabry?" Symposium, Nordic Society of Nephrology, Turku, Finland.
- 2018 "Kidney Biopsy Codes for Pathologists", 30th European Congress of Pathology, Bilbao, Spain
- 2018 "Glass slides and digital slides: How long to store?", 14th European Congress on Digital Pathology and the 5th Nordic Symposium on Digital Pathology, Helsinki, Finland

- 2017 “Start Small – Grow Big? Digital Pathology in Norway”, Global Engage Digital Pathology Congress, London, United Kingdom
- 2017 “Recording kidney biopsies: Defining data sets”, 29th European Congress of Pathology, Amsterdam, The Netherlands
- 2017 Quiz “Renal biopsy cases from Bergen and Oslo”, Bergen Spring Meeting, Bergen, Norway.
- 2015 “10 reasons why I prefer digital slides in renal biopsy diagnostics”, 27th European Congress of Pathology, Belgrade, Serbia.
- 2013 “A case of glomerular basement membrane lamellation associated with mutation in the MYO1E gene and not with Alport syndrome”, 25th European Congress of Pathology, Lisbon, Portugal.
- 2010 “A case of unexplained renal failure”, First international renal pathology conference, La Coruna, Spain.

Fellowships, awards, prizes

- 2017 The Bronze Medal “In Memoriam Nicolae Ursea”. 10th edition of the National Nephrology Congress, Romanian Society of Nephrology, Bucharest
- 2013 Michael J. Mihatsch and Dusan Ferluga Award for Transplant and Native Kidney Pathology: Best abstract, 25th European Congress of Pathology, Lisbon
- 2004 Research Award, The Norwegian Society of Pathology