

ESP Advanced Training Centre for head and neck pathology

We can provide an advanced training in Head and Neck Pathology to international fellows, in particular in specialized fields of salivary gland and sinonasal pathology. We can offer up to 5 places per year with minimum of one month stay, but possibly 3 to 6 months. There is not any special limitation of the period of the year. There will be no charge for training, and we can provide low-cost accommodation to the trainees. We have some suitable accommodation facilities, or we can arrange accommodation for reasonable price. If visa is necessary, administrative help will be provided. Insurance or other documents, if required, will be provided. After completion of the fellowship, a certificate will be issued describing the subject of the training. An official letter of invitation – if necessary – could be sent for the applicant.

Name of the centre, address ▪ Department of Pathology, Charles University, Faculty of Medicine Plzen and Biopsticka laborator ltd, Plzen, Czech Republic

Chair of the centre ▪ prof. Michal Michal, MD

Head of the training programme ▪ **prof. Alena Skálová, MD, PhD**

Details about specific areas in which training can be offered ▪ Head Neck Pathology, in particular pathology of salivary glands, including immunoprofile, molecular signatures and differential diagnostic of salivary gland tumors. Sinonasal and oral pathology with special reference to newly described and molecularly characterized entities.

Number of positions offered for each year, expected duration of the training ▪ up to 5 positions for each year, expected duration of training is 1 to 2 months for each trainee

Specific periods of the year when the visit may be realised (should be defined in direct contact between the centre of excellence and the applicant) ▪ we can accept trainees throughout the year

Contact address for requesting details by the applicant:

Prof. Alena Skálová, MD, PhD

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prof. Alena Skálová, PhD. - short CV and Scientific and Research Activities:

292 scientific papers in peer-reviewed international journals

Science Citation Index jan 2026:

H-index (Web of Science): 48

Total of citing articles 4 290; (4 142 without autocitations); Sum of the Times citation items 7 593 (6 908 without autocitations), average citation per item: 26

The author of 3 chapters in WHO Classification of Tumours. Pathology and Genetics of Head and Neck Tumours. (eds. Barnes L, Eveson JW, Reichart P, Sidransky D). IARC Press, Lyon 2005. Author or co-author 13 chapters in books (in Czech and English). Author of the book Hellquist and Skalova: Histopathology of the Salivary Glands, Springer, 2014. The author of 7 chapters in WHO Classification of Tumours of Head and Neck (2017). Co-author of many chapters in the books in Head and Neck and Breast Pathology. Responsible editor of Salivary gland section in WHO Head and Neck Tumors, 2023.

Expert reviewer for Histopathology, Head and Neck Pathology, Pathology Research Practice, Human Pathology, Oral Pathology Medicine, J Clinical Pathology, Am Journal of Surgical Pathology, and Virchows Archiv, etc.

Research activities supported by Grants in Czech Republic

1. Kinetics of cell proliferation in salivary gland tumors and its significance in prognosis. New method for estimation of cell proliferation fraction. (A.Skálová) 1993-1995 (Internal Grant Agency of Charles University).
2. Extracellular matrix in salivary gland tumors and significance of its composition in morphogenesis. (A.Skálová) 1994-1996 (Internal Grant Agency of Charles University).
3. Biological nature of lymphoid nodules in bone marrow specimens: diagnostic approach. (F.Fakan, A.Skálová, J.Kuntcherová) 1995-1997 (Internal Grant Agency of Charles University).
4. Significance of cell kinetics in prognosis and differential diagnosis of salivary gland tumors. (A.Skálová) 1995-1996 (Grant Agency of Health Ministry)
5. Primary extranodal malignant lymphomas: morphologic and immunohistochemical criteria for their diagnosis and prediction of prognosis. (A.Skálová, L.Plank et al) 1996-1998 (Internal Grant Agency of Charles University).
6. Expression of c-kit protein, EGFR and HER-2/neu in high grade carcinomas of salivary gland: prognostic or predictive significance? (A.Skálová, I. Stárek) 2009-2011 (Grant Agency of Health Ministry)
7. Expression of vascular endothelial growth factor VEGF-C/D and its significance for lymphangiogenesis, lymph node metastasizing and prognosis of salivary gland carcinomas. (I.Stárek, A. Skálová), 2011-2016 (Grant Agency of Health Ministry).

List of 10 scientific papers most frequently cited:

1. Skalova A, Vanecek T, Sima R, et al. Mammary analogue secretory carcinoma of salivary glands containing the *ETV6-NTRK3* fusion gene: a hitherto undescribed salivary gland tumor entity. *Am J Surg Pathol* 2010;34:599-608. 580 citations (WoS).
2. Connor A, Perez-Ordóñez B, Shago M. et al. Mammary analog secretory carcinoma of salivary gland origin with the *ETV6* gene rearrangement by FISH: Expanded morphologic and immunohistochemical spectrum of a recently described entity. *Am J Surg Pathol* 2012;36:27-34. 161 citations (WoS).
3. Skalova A, Vanecek T, Majewska H, et al. Mammary Analogue Secretory Carcinoma of Salivary Glands With High-grade Transformation Report of 3 Cases With the *ETV6-NTRK3* Gene Fusion and Analysis of TP53, beta-Catenin, *EGFR*, and *CCND1* Genes. *Am J Surg Pathol* 2014;38:23-33. 140 citations (WoS).

4. Weinreb I, Piscuoglio S, Martelotto LG, et al. Hotspot activating PRKD1 somatic mutations in polymorphous low-grade adeno carcinomas of the salivary glands. *Nature Genet* 2014;46:1166-1169. 131 citations (WoS).
5. Skalova A, Vanecek T, Simpson RHW, et al. Mammary Analogue Secretory Carcinoma of Salivary Glands Molecular Analysis of 25 ETV6 Gene Rearranged Tumors With Lack of Detection of Classical ETV6-NTRK3 Fusion Transcript by Standard RT-PCR: Report of 4 Cases Harboring ETV6-X Gene Fusion. *Am J Surg Pathol* 2016;40:3-13. 110 citations (WoS).
6. Skalova A, Stárek I, Vaněček T, et al. Expression of HER-2/neu gene and protein in salivary duct carcinoma of parotid gland as revealed by fluorescence in situ hybridization and immunohistochemistry. *Histopathology* 2003;42:348-356. IF=2,952, ISSN:0309-0167, 105 citations (WoS).
7. Majewska H, Skalova A, Stodulkovski D, et al. Mammary analogue secretory carcinoma of salivary glands: a new entity associated with ETV6 gene rearrangement. *Virch Arch* 2015; 466:245-254. 98 citations (WoS).
8. Skalova A, Vanecek T, Martinek P, et al. Molecular Profiling of Mammary Analog Secretory Carcinoma Revealed a Subset of Tumors Harboring a Novel ETV6-RET Translocation: Report of 10 Cases. *Am J Surg Pathol* 2018; 42:234-246. 77 citations (WoS).
9. Skalova A. Mammary analogue secretory carcinoma of salivary gland origin: An update and expanded morphologic and immunohistochemical spectrum of recently described entity. *Head Neck Pathol* 2013; 7 (1):530-536. 89 citations (WoS).
10. Church AJ... Skalova A... Harris MH. Recurrent EML4-NTRK3 fusions in infantile fibrosarcoma and congenital mesoblastic nephroma suggest a revised testing strategy. *Modern Pathol* 2018;31 (3):463-473. 74 citations (WoS).

Recently published papers:

1. Skálová A, Laco J, Thompson LDR, Bradová M, Vander Poorten V, Araújo ALD, Stenman G, Leivo I, Agaimy A, Ferlito A. Recent developments in salivary gland pathology after the WHO 2024 classification: new developments in existing entities and evolving new entities. *Virchows Arch*. 2026 Apr 25. doi: 10.1007/s00428-026-04532-z. Epub ahead of print. PMID: 42032135.

2. Klubickova N, Loghides F, van den Hout MFCM, Costes-Martineau V, Ferrara G, Rito M, Hajkova V, Grossmann P, Steiner P, Kovarova I, Michal M, Leivo I, [Skalova A](#). Expanding the Molecular-genetic Spectrum of Canalicular Adenoma-like Subtype of Pleomorphic Adenoma of Salivary Glands. *Am J Surg Pathol* 2025;49:554-563.
3. [Skalova A](#), Bradova M, Agaimy A, Laco J, Badual C, Ihrler S, Damjanov I, Rupp NJ, Bacchi CE, Mueller S, Ventela S, Zhang D, Comperat E, Martinek P, Sima R, Vanecek T, Grossmann P, Steiner P, Hajkova V, Kovarova I, Michal M, Leivo I. Molecular Profiling of Sinonasal Adenoid Cystic Carcinoma: Canonical and Noncanonical Gene Fusions and Mutation. *Am J Surg Pathol* 2025;49:227-242.
4. Bradova M, Costes-Martineau V, Laco J, Vanecek T, Grossmann P, Nemcova J, Pavlovsky Z, [Skalova A](#), Michal M. Sinonasal adenosquamous carcinomas arising in seromucinous hamartoma or respiratory epithelial adenomatoid hamartoma with atypical features: Report of five detailed clinicopathological and molecular characterisation of rare entity. *Histopathology* 2025;86:585-602.
5. Othman BAEOK, Leivo I, [Skalova A](#). Artificial Computational Pathology May Refine and Redefine Salivary Gland Tumor Entities: A Molecular Bioinformatic Perspective. 1st Joint DFH/UFA workshop on AI in Medicine 2024:31-33.
6. de Lima-Souza RA, Altemani A, Michal M, Mariano FV, Leivo I, [Skalova A](#). Expanding the Molecular Spectrum of Carcinoma Ex Pleomorphic Adenoma: An Analysis of 84 Cases With a Novel HMGA2::LINC02389 Fusion. *Am J Surg Pathol* 2024;48:1491-1502.
7. Mauramo M, Tarkkanen J, [Skalova A](#), Leivo I. Oncocytic intraductal carcinoma of parotid gland with a novel AGK::BRAF gene fusion. *Virchows Arch* 2024;485:925-929.
8. [Skalova A](#), Klubickova N, Bradova M, Agaimy A, Rupp NJ, Damjanov I, Kolnikova G, Martinek P, Steiner P, Grossmann P, Vanecek T, Michal M, Leivo I. Discovery of Novel TULP4/ACTN4/EWSR1/ACTB::MYB and ESRRG::DNM3 Fusions Expands Molecular Landscape of Adenoid Cystic Carcinoma Beyond Fusions Between MYB/MYBL1 and NFIB Genes. *Am J Surg Pathol* 2024;48:1503-1511.
9. de Lima-Souza RA, Ferreira IV, Chone CT, Egal ESA, [Skalova A](#), Altemani A, Mariano FV. Secretory carcinoma of the minor salivary gland: An in-depth case report. *Oral Oncol* 2024:158.
10. Bradley PJ, Stenman G, Thompson LDR, [Skalova A](#), Simpson RHW, Slootweg PJ, Franchi A, Zidar N, Nadal A, Hellquist H, Williams MD, Leivo I, Agaimy A, Ferlito A. Metastatic cutaneous squamous cell carcinoma accounts for nearly all squamous cell carcinomas of the parotid gland. *Virchows Arch* 2024;485:3-11.

11. [Skalova A](#), Agaimy A, Bradova M, Vander Poorten V, Hanna E, Guntinas-Lichius O, Franchi A, Hellquist H, Simpson RHW, Lopez F, Nuyts S, Chiesa-Estomba C, Ng SP, Homma A, Teng Y, Leivo I, Ferlito A. Molecularly defined sinonasal malignancies: an overview with focus on the current WHO classification and recently described provisional entities. *Virchows Arch* 2024;484:885-900.
12. Hermesen M, Bossi P, Capper D, Fleming J, Haybaeck J, Balibrea EM, Nuyts S, [Skalova A](#), Thomson D, Trama A, Turri-Zanoni M, Verillaud B, Woods R, von Buchwald C, Lechner M. The European Network for Sinonasal Cancer Research (EUSICA) – A pan-European initiative targeting a group of orphan tumours. *Eur J Cancer* 2024:202.
13. [Skalova A](#), Bradova M, Michal M, Mosaieby E, Klubickova N, Vanecek T, Leivo I. Molecular pathology in diagnosis and prognostication of head and neck tumors. *Virchows Arch* 2024;484:215-231.
14. [Skalova A](#), Taheri T, Bradova M, Vanecek T, Franchi A, Slouka D, Kostlivy T, de Rezende G, Michalek J, Klubickova N, Ptakova N, Nemcova A, Michal M, Agaimy A, Leivo I. SMARCB1-deficient sinonasal adenocarcinoma: a rare variant of SWI/SNF-deficient malignancy often misclassified as high-grade non-intestinal-type sinonasal adenocarcinoma or myoepithelial carcinoma. *Virchows Arch* 2024;485:245-256.
15. Michal M, [Skalova A](#), Hycza M, Laco J, Vanecek T, Rupp NJ, Michalova K, Agaimy A, Bradova M. Nasal and sinonasal tumors formed by atypical adenomatous lesions arising in respiratory epithelial adenomatoid hamartoma/seromucinous hamartoma. *Virchows Arch* 2024;485:31-42.
16. Bradova M, Thompson LDR, Hycza M, Vanecek T, Grossman P, Michal M, Hajkova V, Taheri T, Rupp N, Suster D, Lakhani S, Nikolov DH, Zalud R, [Skalova A](#), Agaimy A. Branchioma: immunohistochemical and molecular genetic study of 23 cases highlighting frequent loss of retinoblastoma 1 immunoreexpression. *Virchows Arch* 2024;484:103-117.
17. Wenig BM, Jo VY, Nakaguro M, [Skalova A](#). Histologic Considerations and Salivary Gland Tumor Classification in Surgical Pathology. In: *The Milan System for Reporting Salivary Gland Cytopathology* 2023:229-235.
18. Othman BAEOK, Bradova M, Dobner T, Michal M, [Skalova A](#). Reply: Salivary Gland Secretory Carcinoma: Clinicopathologic and Genetic Characteristics of 215 Cases and Proposal for a Grading System. *Am J Surg Pathol* 2023;47:1332-1334.
19. Koshyk O, Dehner CA, van den Hout MFCM, Vanden Bempt I, Sciot R, Huang H, Agaimy A, Din NU, Klubickova N, Mosaieby E, [Skalova A](#), Michalova K, Schoffski P, Oliveira AM, Halling KC, Gupta S, Gross JM, Nin JWM, Michal M, Folpe AL,

Kosemehmetoglu K, Torres-Mora J. EWSR1::POU2AF3(COLCA2) Sarcoma: An Aggressive, Polyphenotypic Sarcoma With a Head and Neck Predilection. *Mod Pathol* 2023:36.

20. Bartos V, Sejnova D, [Skalova A](#), Beder I. Alveolarny sarkom makkych tkaniv u dietata – opis pripadu. *Klin Onkol* 2023:36:396-400.
21. Agaimy A, Baneckova M, De Almeida J, Dickson BC, Dimmler A, Hartmann W, Lae M, Pablik J, Schubart C, [Skalova A](#), Stoehr R, Trautmann M, Wardelmann E, Wassef M, Weinreb I. Recurrent EWSR1::COLCA2 Fusions Define a Novel Sarcoma With Spindle/Round Cell Morphology and Strong Predilection for the Sinonasal Tract. *Am J Surg Pathol* 2023:47:361-369.
22. [Skalova A](#), Hyrcza MDD. Proceedings of the North American Society of Head and Neck Pathology Companion Meeting, New Orleans, LA, March 12, 2023: Classification of Salivary Gland Tumors: Remaining Controversial Issues?. *Head Neck Pathol* 2023:17:285-291.
23. Othman BAEOK, Steiner P, Leivo I, [Skalova A](#). Rearrangement of KMT2A Characterizes a Subset of Pediatric Parotid Mucoepidermoid Carcinomas Arising Metachronous to Acute Lymphoblastic Leukemia. *Fetal Pediatr Pathol* 2023:42:796-807.
24. Klubickova N, Mosaieby E, Ptakova N, Trinquet A, Lae M, Costes-Martineau V, [Skalova A](#). High-grade non-intestinal type sinonasal adenocarcinoma with ETV6::NTRK3 fusion, distinct from secretory carcinoma by immunoprofile and morphology. *Virchows Arch* 2023:483:187-195.
25. Baneckova M, Thompson LDR, Hyrcza MD, Vanecek T, Agaimy A, Laco J, Simpson RHW, Di Palma S, Stevens TM, Brcic L, Etebarian A, Dimnik K, Majewska H, Starek I, O'Regan E, Salviato T, Helliwell T, Horakova M, Biernat W, Onyuma T, Michal M, Leivo I, [Skalova A](#). Salivary Gland Secretory Carcinoma: Clinicopathologic and Genetic Characteristics of 215 Cases and Proposal for a Grading System. *Am J Surg Pathol* 2023:47:661-677.
26. [Skalova A](#), Rooper LM. Recently Described and Molecularly Defined Head and Neck Tumors. *Adv Anat Pathol* 2023:30:85-85.
27. Weinreb I, Rooper LM, Dickson BC, Hahn E, Perez-Ordóñez B, Smith SM, Lewis JS, [Skalova A](#), Baneckova M, Wakely PE, Thompson LDR, Rupp NJ, Freiburger SN, Koduru P, Gagan J, Bishop JA. Adenoid Cystic Carcinoma with Striking Tubular Hypereosinophilia: A Unique Pattern Associated with Nonparotid Location and Both Canonical and Novel EWSR1::MYB and FUS::MYB Fusions. *Am J Surg Pathol* 2023:47:497-503.

28. Klubickova N, Grossmann P, Steiner P, Baneckova M, Mosaieby E, Koshyk O, Michal M, Leivo I, Skalova A. A minority of cases of acinic cell carcinoma of the salivary glands are driven by an NR4A2 rearrangement: the diagnostic utility of the assessment of NR4A2 and NR4A3 alterations in salivary gland tumors. *Virchows Arch* 2023;482:339-345.
29. Lanic MD, Guerin R, Sater V, Durdilly P, Ruminy P, Skalova A, Lae M. A novel SMARCA2-CREM fusion expanding the molecular spectrum of salivary gland hyalinizing clear cell carcinoma beyond the FET genes. *Genes Chromosomes Cancer* 2023;62:231-236.
30. van Herpen C, Vander Poorten V, Skalova A, Terhaard C, Maroldi R, van Engen A, Baujat B, Locati LD, Jensen AD, Smeele L, Hardillo J, Costes MV, Trama A, Kinloch E, Even C, Machiels JP. Salivary gland cancer: ESMO-European Reference Network on Rare Adult Solid Cancers (EURACAN) Clinical Practice Guideline for diagnosis, treatment and follow-up. *ESMO Open* 2022;7:1-16.
31. Hellquist H, Agaimy A, Stenman G, Franchi A, Nadal A, Skalova A, Leivo I, Zidar N, Simpson RHW, Slootweg PJ, Hernandez-Prera JC, Ferlito A. Development of head and neck pathology in Europe. *Virchows Arch* 2022;480:951-965.
32. Bartos V, Rac P, Skalova A. Bifenotypovy sinonazalny sarkom - opis pripadu. *Klin Onkol* 2022;35:402-406.
33. Stenman G, Fehr A, Skalova A, Vander Poorten V, Hellquist H, Mikkelsen LH, Saba NF, Guntinas-Lichius O, Chiesa-Estomba CM, Andersson MK, Ferlito A. Chromosome Translocations, Gene Fusions, and Their Molecular Consequences in Pleomorphic Salivary Gland Adenomas. *Biomedicines* 2022;10:nestránkováno.
34. Soares CD, Santana T, de Souza LL, de Almeida OP, Skalova A, Altemani A, Sales ADO. Intraductal carcinoma of the submandibular gland: A case report. *Oral Oncol* 2022;132.
35. Agaimy A, Ihrler S, Baneckova M, Martineau VC, Mantsopoulos K, Hartmann A, Iro H, Stoehr R, Skalova A. HMGA2-WIF1 Rearrangements Characterize a Distinctive Subset of Salivary Pleomorphic Adenomas With Prominent Trabecular (Canalicular Adenoma-like) Morphology. *Am J Surg Pathol* 2022;46:190-199.
36. Skalova A, Leivo I, Hellquist H, Simpson RHW, Vander Poorten V, Willems SM, Mosaieby E, Slouka D, Ferlito A. Clear Cell Neoplasms of Salivary Glands: A Diagnostic Challenge. *Adv Anat Pathol* 2022;29:217-226.
37. Skalova A, Hycza MD, Leivo I. Update from the 5th edition of the World Health Organization Classification of Head neck Tumors: salivary glands. *Head Neck Pathol* 2022;16:40-53.

38. Baneckova M, Michal M, Hajkova V, Haller F, Mosaieby E, Salajka P, Arold C, Nachtsheim L, Agaimy A, Skalova A. Misleading Morphologic and Phenotypic Features (Transdifferentiation) in Solitary Fibrous Tumor of the Head and Neck Report of 3 Cases and Review of the Literature. Am J Surg Pathol 2022;46:1084-1094.
39. Toper MH, Sarioglu S, Skalova A. Biomarkers in Head and Neck Carcinomas. In: Biomarkers in Carcinoma of Unknown Primary 2022:67-98.
40. Klubickova N, Kinkor Z, Michal M, Baneckova M, Hajkova V, Michalek J, Pink R, Dvorak Z, Leivo I, Skalova A. Epithelioid Soft Tissue Neoplasm of the Soft Palate with a PTCH1-GLI1 Fusion: A Case Report and Review of the Literature. Head Neck Pathol 2022;16:621-630.
41. Skalova A, Hycza MD, Vanecek T, Baneckova M, Leivo I. Fusion-positive salivary gland carcinomas. Genes Chromosomes Cancer 2022;61:228-243.
42. Skalova A, Baneckova M, Laco J, Di Palma S, Agaimy A, Ptakova N, Costes-Martineau V, Petersson BF, van den Hout MFCM, de Rezende G, Klubickova N, Koblizek M, Koshyk O, Vanecek T, Leivo I. Sclerosing Polycystic Adenoma of Salivary Glands: A Novel Neoplasm Characterized by PI3K-AKT Pathway Alterations-New Insights Into a Challenging Entity. Am J Surg Pathol 2022;46:268-280.