

ESP Advanced training centre for pulmonary pathology, Padova, Italy

a) Name of the centre

University of Padova, Department of Cardiac, Thoracic, Vascular Sciences, and Public Health, Pulmonary Pathology Section

b) Head off the training centre

Prof. Fiorella Calabrese

c) Details about specific areas in which training can be offered

Pulmonary diseases have been increasing concerning either tumoral or non-tumoral pathology. The pathologist has become even more important in the oncological field for the prognostic stratification and therapeutic choices, as well as fundamental in lung transplant pathology, from the explanted lung diagnosis to the follow-up monitoring. The activities during the training period will include:

- 1) Standardization of pre-analytical procedures
- 2) Appropriate use and interpretation of special techniques: immunohistochemistry/immunocytochemistry, molecular pathology, morphometric analysis, and electron microscopy; use of basic AI software" for analysis of several parameters
- 3) Weekly multidisciplinary team discussions in different topics: a) interstitial lung diseases (on Wednesday afternoon) b) lung tumours (on Wednesday morning) c) lung transplant –pre-transplant evaluation- (on Wednesday afternoon) d) lung transplant –post- transplant evaluation- (on Friday afternoon)
- 4) Experience in the diagnosis of tumoral lung diseases and non-tumoral lung diseases, in particular interstitial lung diseases and lung transplant pathology
- 5) Training in tissue biobanking
- 6) Training in digital pathology with morphometry/AI

d) EAT Pulmonary Pathology Proposed Centre

Padova University Hospital is a referral centre for all pulmonary diseases. Pathology laboratory holds ISO9001 certification, and a frozen sample biobank is available and obtained EQA Lung accreditation for PD-L1, ALK, ROS1, EGFR biomarkers in 2018. The Head of the training programme (Prof. Fiorella Calabrese) will contact the trainee in order to send the invitation letter, as well as to assist in finding low-cost accommodation and in obtaining the necessary visa, insurance or other documents. Moreover, she will be the tutor during the training program and will provide a detailed certificate after the completion of the programme.

e) Positions offered for each year A total of three (not simultaneous) applicants per year. A minimum of 3 month is required

There is no time restriction for the period of the year when the visit may be realized, but the applicant should plan a minimum of two months to get everything organized for the stay; also, this time is required to prepare for the stay of the applicant at the training centre.

f) Accommodation & Documents

- No charge for training will be raised.
- We will help in making reservations for accommodation.

- A support to get necessary visa, insurance or other documents if required will be provided.
- After completion of the training period the trainee will receive a detailed certificate describing the work.
- A letter of invitation for the applicant can be issued if required
- Possibilities of assistance with accommodation for fellows and organization of teaching courses at local, regional, national and international level.

g) Contact address

Dept. Cardiac, Thoracic, Vascular Sciences and Public Health, University of Padova; Pathological Anatomy Section, via A. Gabelli 61, 35121 Padova (Italy). Phone: +39 0498272268; email: fiorella.calabrese@unipd.it

h) List of publications of the head of the training centre (Prof. Fiorella Calabrese) (Key references: 2020-2021)

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- 2) Cozzi E, Faccioli E, Marinello S, Loy M, Congedi S, **Calabrese F**, Romagnoli M, Cattelan AM, Rea F. *COVID-19 pneumonia in lung transplant recipients: report of two cases*. Am J Transplant. 2020 May 12;10.1111/ajt.15993. doi: 10.1111/ajt.15993. PMID: 32400074
- 3) Pezzuto F, Fortarezza F, Mammana M, Pasello G, Pelosi G, Rea F, **Calabrese F**. *Immunohistochemical neuroendocrine marker expression in primary pulmonary NUT carcinoma: a diagnostic pitfall*. Histopathology. 2020 Jun 5. doi: 10.1111/his.14166. PMID: 32502287.
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- 5) Mammana M, Bergamo F, Procaccio L, Schiavon M, Loupakis F, Lonardi S, Manai C, Schirripa M, Fassan M, Dei Tos AP, **Calabrese F**, Rea F, Zagonel V. *Outcome of patients with colorectal cancer undergoing lung metastases resection: a single-institution retrospective analysis*. Tumori J. 2020 Jun 29;300891620930793. doi: 10.1177/0300891620930793. Online ahead of print. PMID: 32597321
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- 7) **Calabrese F**, Schiavon M, Perissinotto E, Lunardi F, Marulli G, Di Gregorio G, Pezzuto F, Vuljan SE, Forin E, Wiegmann B, Jonigk D, Warnecke G, Rea F. *Organ care system lung resulted in lower apoptosis and inos expression in donor lungs*. Am J Transplant 2020 Jul 11. doi: 10.1111/ajt.16187. Online ahead of print.

- 8) Thunnissen E, Weynand B, Udovicic-Gagula D, Brcic L, Szolkowska M, Hofman P, Smojver-Ježek S, Anttila S, **Calabrese F**, Kern I, Skov B, Perner S, Dale VG, Eri Z, Haragan A, Leonte D, Carvalho L, Prince SS, Nicholson S, Sansano I, Ryska A. *Lung cancer biomarker testing: perspective from Europe*. *Transl Lung Cancer Res*. 2020 Jun;9(3):887-897. doi: 10.21037/tlcr.2020.04.07. PMID: 32676354.
- 9) A. Borczuk, S. Salvatore, S. Seshan, S. Patel, J. Bussel, M. mostyka, S. Elsoukkary, B. He, C. Del Vecchio, F. Fortarezza, F. Pezzuto, P. Navalesi, A. Crisanti, M. Fowkes, C. Bryce, **F. Calabrese**, and M.B. Beasley. *COVID-19 pulmonary pathology: A multi-institutional autopsy cohort from Italy and New York City*. *Mod Pathol*. 2020 Sep 2. doi: 10.1038/s41379-020-00661-1. PMID: 32879413.
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- 12) Berghmans T, Lievens Y, Aapro M, Baird AM, Beishon M, **Calabrese F**, Dégi C, Delgado Bolton RC, Gaga M, Lövey J, Luciani A, Pereira P, Prosch H, Saar M, Shackcloth M, Tabak-Houwaard G, Costa A, Poortmans P. *European Cancer Organisation Essential Requirements for Quality Cancer Care (ERQCC): Lung cancer*. *Lung Cancer*. 2020 Dec;150:221-239. doi: 10.1016/j.lungcan.2020.08.017. Epub 2020 Sep 4. PMID: 33227525
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