Stanford

Lise Mangiante

Postdoctoral Scholar, Stanford Cancer Institute

Bio

HONORS AND AWARDS

- School of Medicine Dean's Postdoctoral Fellowships, Stanford University (2024)
- Ph.D. Scholarship, Ligue Contre le Cancer (LNCC) (2018-2021)
- Mesothelioma Research Network (MRN) - Travel Fellowship Award, British Lung Fondation (BLF) (2020)
- iMig Young Investigator Award, Kazan Law (2020)
- Mobility Grant, research internship in Dr. Hans Clevers Group, Hubrecht Institute, Netherlands, Cancéropôle Lyon Auvergne Rhône-Alpes (CLARA) (2019)
- Mobility Grant for an internship in DKFZ, Heidelberg, Germany, Region Loire Atlantique (2017)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, NCI Metastasis Research Network (MetNet) (2022 - present)
- Member, International Association for the Study of Lung Cancer (IASLC) (2024 - present)
- Member, Mesothelioma Research Network (MRN) (2019 - present)
- Member, American Association for Cancer Research (AACR) (2023 - present)

PROFESSIONAL EDUCATION

- Master of Science, Unlisted School (2018)
- Bachelor of Science, Unlisted School (2016)
- Master of Science, Universite Claude-Bernard (Lyon I) (2018)
- Doctor of Philosophy, Lyon 1 University, France , Oncology and genomics (2021)
- Master of Science, Lyon 1 University, France , Oncology 3.0: from multi-omics analyses to personalised medicine (2018)
- Master of Science, Oniris Engineering school, Nantes, France , Health Biotechnology and Engineering (2018)

STANFORD ADVISORS

- Christina Curtis, Postdoctoral Faculty Sponsor
- Jennifer Caswell-Jin, Postdoctoral Research Mentor

Research & Scholarship

RESEARCH INTERESTS

- Data Sciences

- Science Education

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research focused on understanding the evolution and ecology of cancer, and determinants of disease progression through analysis and modeling of high-dimensional, clinically annotated datasets.

Publications

PUBLICATIONS

- **Whole-genome doubling drives immune evasion by silencing antigen presentation.** *Cancer cell*
  Foidart, P., Li, Z., Cai, X., Seehawer, M., Brown, D. D., Tawawalla, A., Baldominos, P., Parvin, S., Nishida, J., Rojas-Jimenez, E., Bui, T. M., Diciaccio, B., Kumar, et al
  2026
- **Tumor and microenvironmental co-evolution in metastatic triple-negative breast cancer during immunotherapy**
  Park, S., de Graaf, M., Lomakin, A., Ma, Z., Greenwald, N. F., Mangiante, L., Weiss, C. L., Simon, B., Angelo, M., Kok, M., Curtis, C.
  AMER ASSOC CANCER RESEARCH.2026
- **Generative AI improves breast cancer genomic subtype prediction from histology images.**
  Simon, B., Weiss, C. L., Chan, D., Mangiante, L., Smith, N. H., Ma, Z., Karakas, C., Curtis, C.
  AMER ASSOC CANCER RESEARCH.2026
- **Temporal and spatial composition of the tumor microenvironment predicts response to immune checkpoint inhibition in metastatic TNBC.** *Nature cancer*
  Greenwald, N. F., Nederlof, I., Sowers, C., Ding, D. Y., Park, S., Kong, A., Houlahan, K. E., Varra, S. R., de Graaf, M., Geurts, V., Liu, C. C., Ranek, J. S., Voorwerk, et al
  2026
- **Characterization of breast tumors and the tumor immune landscape in young, diverse participants of the Northern California Breast Cancer Family Registry**
  McClure, M., Mangiante, L., Simon, B. G., Weiss, C., Ma, Z., Koo, J., Ransohoff, J., John, E. M., Curtis, C., Caswell-Jin, J., Kurian, A. W.
  LIPPINCOTT WILLIAMS & WILKINS.2025: E12551
- **Temporal and spatial composition of the tumor microenvironment predicts response to immune checkpoint inhibition.** *bioRxiv : the preprint server for biology*
  Greenwald, N. F., Nederlof, I., Sowers, C., Ding, D. Y., Park, S., Kong, A., Houlahan, K. E., Varra, S. R., de Graaf, M., Geurts, V., Liu, C. C., Ranek, J. S., Voorwerk, et al
  2025
- **Complex rearrangements fuel ER+ and HER2+ breast tumours.** *Nature*
  Houlahan, K. E., Mangiante, L., Sotomayor-Vivas, C., Adimoelja, A., Park, S., Khan, A., Pribus, S. J., Ma, Z., Caswell-Jin, J. L., Curtis, C.
  2025
- **The G1-S transition is promoted by Rb degradation via the E3 ligase UBR5.** *Science advances*
  Zhang, S., Valenzuela, L. F., Zatulovskiy, E., Mangiante, L., Curtis, C., Skotheim, J. M.
  2024; 10 (43): eadq6858
- **Multi-omic dataset of patient-derived tumor organoids of neuroendocrine neoplasms.** *GigaScience*
  Alcala, N., Voegele, C., Mangiante, L., Sexton-Oates, A., Clevers, H., Fernandez-Cuesta, L., Dayton, T. L., Foll, M.
  2024; 13
- **Druggable growth dependencies and tumor evolution analysis in patient-derived organoids of neuroendocrine neoplasms from multiple body sites.** *Cancer cell*
  Dayton, T. L., Alcala, N., Moonen, L., den Hartigh, L., Geurts, V., Mangiante, L., Lap, L., Dost, A. F., Beumer, J., Levy, S., van Leeuwaarde, R. S., Hackeng, W. M., Samsom, et al
  2023; 41 (12): 2083-2099.e9
- **Multiomic analysis of malignant pleural mesothelioma identifies molecular axes and specialized tumor profiles driving intertumor heterogeneity.** *Nature genetics*

Mangiante, L., Alcala, N., Sexton-Oates, A., Di Genova, A., Gonzalez-Perez, A., Khandekar, A., Bergstrom, E. N., Kim, J., Liu, X., Blazquez-Encinas, R., Giacobi, C., Le Stang, N., Boyault, et al

2023

- **A molecular phenotypic map of malignant pleural mesothelioma.** *GigaScience*

  Di Genova, A., Mangiante, L., Sexton-Oates, A., Voegele, C., Fernandez-Cuesta, L., Alcala, N., Foll, M.

  2022; 12

- **Differential Orthopedia Homeobox expression in pulmonary carcinoids is associated with changes in DNA methylation.** *International journal of cancer*

  Moonen, L., Mangiante, L., Leunissen, D. J., Lap, L. M., Gabriel, A., Hillen, L. M., Roemen, G. M., Koch, A., van Engeland, M., Dingemans, A. C., Foll, M., Alcala, N., Fernandez-Cuesta, et al

  2022; 150 (12): 1987-1997

- **Challenges in lung and thoracic pathology: molecular advances in the classification of pleural mesotheliomas.** *Virchows Archiv : an international journal of pathology*

  Fernandez-Cuesta, L., Mangiante, L., Alcala, N., Foll, M.

  2021; 478 (1): 73-80

- **A molecular map of lung neuroendocrine neoplasms.** *GigaScience*

  Gabriel, A. A., Mathian, E., Mangiante, L., Voegele, C., Cahais, V., Ghantous, A., McKay, J. D., Alcala, N., Fernandez-Cuesta, L., Foll, M.

  2020; 9 (11)

- **Redefining malignant pleural mesothelioma types as a continuum uncovers immune-vascular interactions.** *EBioMedicine*

  Alcala, N., Mangiante, L., Le-Stang, N., Gustafson, C. E., Boyault, S., Damiola, F., Alcala, K., Brevet, M., Thivolet-Bejui, F., Blanc-Fournier, C., Le Rochais, J. P., Planchard, G., Rousseau, et al

  2019; 48: 191-202

- **Integrative and comparative genomic analyses identify clinically relevant pulmonary carcinoid groups and unveil the supra-carcinoids.** *Nature communications*

  Alcala, N., Leblay, N., Gabriel, A. A., Mangiante, L., Hervas, D., Giffon, T., Sertier, A. S., Ferrari, A., Derks, J., Ghantous, A., Delhomme, T. M., Chabrier, A., Cuenin, et al

  2019; 10 (1): 3407

PRESENTATIONS

- Tumor intrinsic and extrinsic characteristics of invasive lobular carcinomas - SABCS 2024
- Complex rearrangements fuel the progression of High-risk Er-positive and HER2-positive breast tumors. - MetNet Annual Meeting 2024
- The role of tissue ecology in the metastasis of estrogen receptor-positive breast cancers - Stanford Hematology & Oncology Retreat 2024
- Breast cancer genomic architecture contributes to immune escape across metastasis - AACR 2024
- Spatial transcriptomic profiling of breast cancer across metastasis - MetNet Annual Meeting (2023)
- Deep genomic characterisation and integration unveil specific cancer tasks and evolutionary traits, together with specific morphological and molecular profiles with important clinical implications. - International Mesothelioma Interest Group (iMig) meeting 2021 Virtual Event
- MESOMICS project: molecular characterisation of Malignant Pleural Mesothelioma using a multi-omic approach. - IASLC 2020 World Conference on Lung Cancer
- Redefining malignant pleural mesothelioma types as a continuum uncovers immune-vascular interactions - 2° journées francophones sur le mésothéliome (2019)
- Redefining malignant pleural mesothelioma types as a continuum uncovers immune-vascular interactions - CRCL Symposium 2019
- Redefining malignant pleural mesothelioma types as a continuum uncovers immune-vascular interactions - Early Career Scientists Association Day (2019)
- Redefining malignant pleural mesothelioma types as a continuum uncovers immune-vascular interactions - Forum CLARA (2019)
- Multi-omic characterisation of rare thoracic tumours - IARC/WHO Scientific Council (2019)