

Faculty



THOMAS R. MULEY, Ph.D.

Research Interests

Biomarkers in lung diseases
Prognostic and predictive factors in thoracic malignancies

Short CV

Affiliation

Thomas R. Muley

Head of Biobank and Tumor Documentation at the Thoraxklinik Heidelberg
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Curriculum Vitae

1979- Study of Biology at the University of Heidelberg
1986
1990 Dissertation (Ph.D.) at the Dept. of Pharmacology, University of Heidelberg
1990- Postdoctoral Fellow, Dept. of Clinical Chemistry and Bacteriology, Thoraxklinik
1993 Heidelberg
1993- Senior Research Scientist and Laboratory Manager, Dept. of Clinical Chemistry,
1995 Thoraxklinik Heidelberg
Since Senior Research Scientist, Dept. of Thoracic Surgery, Thoraxklinik Heidelberg
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Since Head of Biobank, Thoraxklinik Heidelberg
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Since Group leader and assistant manager, Translational Research Unit (STF), Thoraxklinik
2005 Heidelberg
Since Head of Tumor Documentation, Thoraxklinik Heidelberg
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Projects

My research focuses on the identification of novel biomarkers and the clinical evaluation of known biomarkers for diagnosis, prognosis and therapy prediction in thoracic malignancies such as lung cancer and pleural mesothelioma. The main resource for this work is the biobank of the Translational Research Unit (STF) at the Thoraxklinik, Heidelberg. The biomaterials (tissue and blood samples) harvested in the course of routine interventions and approved for use in research projects provide for the increasing need for well characterized samples for translational research. To this end the STF collaborates with a number of local (DKFZ, EMBL, NCT), national (DZL, DKTK) and international (CANCERALIA, European Microarray Consortium, NCI) partners. For example, the main objective of the CANCERALIA Project is to study the role of the lipogenic pathway and Rho GTPases in lung and pancreatic cancer within a European Consortium. The focus of the LungSys Consortium is a systems biology approach to improve our knowledge and treatment options for lung cancer. The joint project with the National Centre for Tumor diseases (NCT) focuses on identifying the molecular mechanisms of early metastatic spread. In addition, the Thoraxklinik biobank contributes materials for the molecular characterization of lung cancer and mesothelioma as part of "The Cancer Genome Atlas" (TCGA –NCI project).

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LungSys, Federal Ministry for education and research (BMBF) (<http://www.lungsys.de/>)



DZL (<http://www.dzg-lungenforschung.de/en/index.html>), Federal Ministry for education and research (BMBF)



Personalized Oncology Program, National Centre for Tumor Diseases (NCT) (<http://www.nct-heidelberg.de/>)



CANCERIALIA, The European Commission's 7th Framework Programme (<http://www.canceralia.eu/>)



National Cancer Institute (NCI)



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Selected Publications

1. The Cancer Genome Atlas Research Network. Comprehensive genomic characterization of squamous cell lung cancers. *Nature*. 2012, 489: 521- 525
2. Scherf DB, Sarkisyan N, Jacobsson H, Claus R, Bermejo JL, Peil B, Gu L, Muley T, Meister M, Dienemann H, Plass C, Risch A. Epigenetic screen identifies genotype-specific promoter DNA methylation and oncogenic potential of CHRN4. *Oncogene*. 2012 Sep 3. doi: 10.1038/onc.2012.344. [Epub ahead of print]
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5. Warth A, Muley T, Herpel E, Meister M, Herth FJ, Schirmacher P, Weichert W, Hoffmann H, Schnabel PA. Large-scale comparative analyses of immunomarkers for diagnostic subtyping of non-small-cell lung cancer biopsies. *Histopathology*. 2012 May 31. doi: 10.1111/j.1365-2559.2012.04308.x. [Epub ahead of print]
6. Lederlin M, Puderbach M, Muley T, Schnabel PA, Stenzinger A, Kauczor HU, Heussel CP, Herth FJ, Hoffmann H, Dienemann H, Weichert W, Warth A. Correlation of radio- and histomorphological pattern of pulmonary adenocarcinoma. *Eur Respir J*. 2012 Jul 26. [Epub ahead of print]
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35. T. Muley, M. Wiebel, V. Schulz, W. Ebert (1994): Elastolytic activity of alveolar macrophages in smoking-associated pulmonary emphysema. *Clin Investig* 72:269-276
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