Non coding RNAs high throughput sequencing data to classify human blood cell types and lung tumor samples.

Natasha Jorge

34th TBI Winterseminar in Bled 13rd Annual Meeting of the Bompfünewerer Consortium

Non coding RNAs high throughput sequencing data to classify human blood cell types and lung tumor samples.









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### PLOS ONE

#### RESEARCH ARTICLE

snoRNA and piRNA expression levels modified by tobacco use in women with lung adenocarcinoma

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#### Abstract



RESEARCH ARTICLE

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Abstract

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PLOS ONE

#### A High-Dimensional, Deep-Sequencing Study of Lung Adenocarcinoma in Female Never-Smokers

Sang Cheol Kim<sup>1,9</sup>, Yeonjoo Jung<sup>2,3,9</sup>, Jinah Park<sup>1,9</sup>, Sooyoung Cho<sup>2,3,9</sup>, Chaehwa Seo<sup>1,9</sup>, Jaesang Kim<sup>2,3,9</sup>, Pora Kim<sup>2,3</sup>, Jehwan Park<sup>1</sup>, Jihae Seo<sup>1,2,3</sup>, Jiwoong Kim<sup>1</sup>, Seongjin Park<sup>1</sup>, Insu Jang<sup>1</sup>, Namshin Kim<sup>1</sup>, Jin Ok Yang<sup>1</sup>, Byungwook Lee<sup>1</sup>, Kyoohyoung Rho<sup>1</sup>, Yeonhwa Jung<sup>2,3</sup>, Juhee Keum<sup>2,3</sup>, Jinseon Lee<sup>4</sup>, Jungho Han<sup>5</sup>, Sangeun Kang<sup>4</sup>, Sujin Bae<sup>4</sup>, So-Jung Choi<sup>4</sup>, Sujin Kim<sup>6</sup>, Jong-Eun Lee<sup>6</sup>, Wankyu Kim<sup>2,3</sup>, Jhingook Kim<sup>4,7,\*</sup>, Sanghyuk Lee<sup>1,2,3,\*</sup>



### THE CANCER GENOME ATLAS

National Cancer Institute National Human Genome Research Institute





### snoRNA and piRNA expression levels modified by tobacco use in women with lung adenocarcinoma



### snoRNA and piRNA expression levels modified by tobacco use in women with lung adenocarcinoma



snoRNA and piRNA expression levels modified by tobacco use in women with lung adenocarcinoma



33 constitutive genes (all in common with non smokers) snoRNA and piRNA expression levels modified by tobacco use in women with lung adenocarcinoma

- DE snoRNA and piRNA between smokers and non-smokers
- Set of constitutive snoRNA between smoker and non-smokers
- Improve diagnosis and treatment

# The BLUEPRINT atlas of mature hematopoietic cells transcriptomes.



# The BLUEPRINT atlas of mature hematopoietic cells transcriptomes (miRNAs & mRNAs)



# The BLUEPRINT atlas of mature hematopoietic cells transcriptomes. (miRNAs)



# The BLUEPRINT atlas of mature hematopoietic cells transcriptomes. (miRNAs)



# The BLUEPRINT atlas of mature hematopoietic cells transcriptomes. (miRNAs)



# The BLUEPRINT atlas of mature hematopoietic cells transcriptomes.

- Gene expression atlas of mature blood cells (27 different cell types) (90 RNA and 32 small RNA-seq).
- Homogeneity in sample preparation and bioinformatic analysis.
- User can easily retrieve gene and transcript expression values.



