Information

Name:	**Ruben Dries**
Place of Birth:	Geel, Belgium
Nationality:	Belgian
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Education

2009-2015 **Catholic University of Leuven, Belgium**
Erasmus MC, Rotterdam, The Netherlands
Joint-doctorate in Biomedical Sciences, Dr. Danny Huylebroeck
Thesis: *"Dynamics and impact of TGFß family signal interpretation on the transcriptional landscape, studied by perturbation strategies in embryonic stem cells"*
- K.U.Leuven 4 January 2017
- Erasmus M.C. 21 December 2016

2009 **University of Ioannina, Greece**
Summer intern, Dr. Carol Murphy

2008-2009 **Tsinghua University, China**
Master student, Dr. Anming Meng
Thesis*: "Contribution to the functional analysis of RNF11 in the zebrafish embryo"*

2003-2009 **Catholic University of Leuven, Belgium**
Master in the Biomedical Sciences with great distinction
Bachelor in the Biomedical sciences with distinction

Postdoctoral Research

2018-present **Dana-Farber Cancer Institute, USA**
Joint Research Fellow in the groups of Rani George & Guo-Cheng Yuan

2016-2018 **Dana Farber Cancer Institute, USA**
Joint Research Fellow in the groups of Rani George, Kwok-Kin Wong and Guo-Cheng Yuan

2016-2017 **Broad institute, USA**
Reserach Fellow in the cancer programme

Teaching Experience

2019 **Supervisor for summer student Yuntian Fu [Tsinghua]**
Project: "3D visualization of spatial omics data"

2017-2019 **Co-mentor of graduate student Sam Tracy [Harvard]**
Project:"Imputing single-cell expression dropouts using an interative bootstrap clustering approach"

2016 **Supervisor for summer student Bennett H. Parsons [MIT]**
Project: "Establishing a flexible high-throughput ChIPseq pipeline"

2015 **Teaching Assistant for 'Hot Topics' journal club [KULeuven]**
Project: "Role of Omics in Developmental Biology"

2013 **Supervisor for master student, Kurt Buhler [KULeuven]**
Project: "Derivation of Epiblast and Neural Stem Cells from mESC."

2012 **Supervisor for master student, Jasper Neggers [KULeuven]**
Project: "Characterization and evaluation of an in vitro neural differentiation protocol for mESCs optimized for an esiRNA mediated perturbation and qPCR analysis."

Honors

2018 Abstract selected for oral talk at the Keystone meeting (international)
2015 Abstract selected for oral talk at the Syboss meeting (international)
2014 Abstract selected for oral talk at the BSCDB meeting (national)
2009-2012 IWT Fellowship: Strategic Basic Research Fund (2 x 2 years)

	2009-2009	Selected for international summer internship (2 weeks) Ioannina University, Greece
	2008-2009	Selected as pioneer for travel and study fellowship to perform my undergraduate thesis at Tsinghua University, China
Conferences	2019	Single Cell Genomics Meeting, Stockholm, Sweden (Poster)
	2018	HuBMAP Kickoff meeting, Rockville
	2018	Keystone**,** Chromatin architecture, Whistler, Canada (Poster)
	2015	Syboss symposium, Oberstdorf, Germany (Talk)
	2015	Winter School of the Collaborative Research**,** Kleinwalsertal, Austria (Talk)
	2014	IUAP, Rotterdam, The Netherlands (Talk)
	2014	EMBL, Functional Genomics meeting, Heidelberg, Germany (Poster)
	2014	BSCDB, Antwerp, Belgium (Talk)
	2013	IUAP, Liege, Belgium (Poster)
	2013	IUAP, Gent, Belgium (Poster)
	2013	Syboss symposium, Kirchberg, Austria (Poster)
Invited talks	2019	**Erasmus MC, Rotterdam** Title: *"Spatial is the new single"*
	2019	**Boston University & Boston Medical Center** Title: *"Transcription dynamics in cancer treatment and resistance"*
	2018	**CReM (The Center for Regenerative Medicine), Boston University** Title: *"Guided chromatin reorganization as a mechanism of cellular plasticity in cancer"*
Software	2019	Giotto, analysis and visualization platform for single-cell spatial data https://github.com/RubD/Giotto
	2019	RESCUE: method to impute dropout events in single-cell RNAseq data https://github.com/seasamgo/rescue

Articles Published (ORCID: 0000-0001-7650-7754**)**

First and senior author publications:

1. CDK7 Inhibition Potentiates Genome Instability Triggering Anti-Tumor Immunity in Small Cell Lung Cancer, Cancer Cell 2019
   Hua Z*, Christensen C*, **Dries R***, …, Gray NS and Wong KK
2. Integrative analysis of the transcriptional dynamics of the TGFβ/BMP signaling pathway in transition from embryonic stem cells to neural progenitors, Stem Cells 2019
   Dries R, Stryjewska A, Coddens K, Notelaers T, ..., Grosveld FG, Huylebroeck D
3. The CTCF paralog BORIS promotes novel chromatin regulatory interactions in cancer cells, Nature 2019
   Debruyne D*, **Dries R***, Sengupta S, …, Gray NS, Wong KK, Orkin SH, Yuan GC, Young RA, George RE
4. RESCUE: imputing dropout events in single-cell RNA-sequencing data, BMC Bioinformatics 2019
   Tracy S, Yuan GC, **Dries R**[#]
5. CDK12 loss in cancer cells affects DNA damage response genes through premature cleavage and polyadenylation, Nature Communications 2019
   Krajewska M*, **Dries R*,** Grassetti AV, …, Yuan GC, Gray NS, Young RA, Geyer M, Gerber SA, George RE
6. Zeb2 regulates cell fate at the exit from epiblast state in mouse embryonic stem cells, Stem Cells 2016
   Stryjewska A*, **Dries R*,** Pieters T, …, Berx G, van Grunsven LA, Grosveld F, Goossens S, Haigh JJ, Huylebroeck D

** equal contribution*
[#] last author

Collaborative publications:

7. Transcriptome-scale super-resolved imaging in tissues by RNA seqFISH+, Nature 2019
   Eng CHL, Lawson M, Zhu Q, **Dries R**, Koulena N, Takei Y, Yun J, Cronin C, Karp C, Yuan GC, Cai L
8. Identification of spatially associated subpopulations by combining scRNAseq and sequential fluorescence in situ hybridization data, Nature Biotech 2018
   Zhu Q, Shah S, **Dries R**, Cai L*, Yuan GC*
9. Co-clinical trial of olaparib and temozolomide in SCLC PDX models uncovers new biomarkers of sensitivity, Cancer Research 2018
   Drapkin BJ, George J, Stanzione M, Yeap BY, Mino-Kenudson M, Christensen CL, **Dries R**, …, Dyson NJ
10. NK cells mediate synergistic antitumor effects of combined inhibition of HDAC6 and BET in a SCLC preclinical model, Cancer Research 2018
    Liu Y, Li Y, Liu S, Adeegbe DO, Christensen CL, Quinn MM, **Dries R**,, …, Bradner JE, Quayle SN, Wong KK
11. Genomic and functional fidelity of small cell lung cancer patient-derived xenografts, Cancer Discovery 2018
    Drapkin* BJ, George J*, Christensen CL, Mino-Kenudson M, **Dries R**, …, Dyson N, Thomas RK, Farago AF
12. CDK4/6 Inhibition Augments Antitumor Immunity by Enhancing T-cell Activation, Cancer Discovery 2017
    Deng J*, Wang ES*, Jenkins RW, Li S, **Dries R**, Yates K, …, Barbie DA, Gray N, Wong KK.
13. Interleukin-17A Promotes Lung Tumor Progression through Neutrophil Attraction to Tumor Sites and Mediating Resistance to PD-1 Blockade, J Thorac Oncol 2017
    Akbay EA, Koyama S, Liu Y, **Dries R**, Bufe LE, …, Hammerman PS, Dranoff G, Wong KK.
14. Synergistic Immunostimulatory Effects and Therapeutic Benefit of Combined Histone Deacetylase and Bromodomain Inhibition in Non-Small Cell Lung Cancer, Cancer Discovery 2017
    Adeegbe DO, Liu Y, Lizotte PH, Kamihara Y, Aref AR, **Dries R**, …, Bradner J, Quayle SN, Wong KK.
15. Multi-parametric profiling of non-small cell lung cancers reveals distinct immunophenotypes, JCI. 2016
    Lizotte PH*, Ivanova EV*, Awad MM, Jones RE, Keogh L, Liu H, **Dries R**, …, Bittinger M, Wong KK
16. BMP-SMAD signaling regulates lineage priming, but is dispensable for self-renewal in mouse embryonic stem cells, Stem Cell Reports 2016 January
    Fernandes MG, **Dries R**, Roost MS, …, Huylebroeck D, Mummery C, Zwijsen A, Chuva de Sousa Lopes SM
17. Few Smad proteins and many Smad-interacting proteins yield multiple functions and action modes in TGF/BMP signaling in vivo, Cytokine & Growth Factor Reviews 2013
    Conidi A , Cazzola S, Beets K, Coddens K, Collart C, …, **Dries R**, Esguerra C, …, Zwijsen A, Huylebroeck D.
18. Directed migration of cortical interneurons depends on the cell-autonomous action of Sip1, Neuron 2013.
    van den Berghe V, Stappers E, Vandesande B, …, **Dries R**, …, Aerts S, Huylebroeck D, Seuntjens E.

First author papers In revision

19. Giotto, a pipeline for integrative analysis and visualization of single-cell spatial transcriptomic data, Nature Biotechnology (https://www.biorxiv.org/content/10.1101/701680v1)
    Dries R*, Zhu Q*, Eng CHL, Sarkar A, Bao F, George RE, Pierson N, Cai L, Yuan GC