

Annexes 1 to 8

Annex 1 : List of most important publications of the NCCR.

(Publications are included from the NCCR members during the periods of their membership. All these publications directly or indirectly benefited from NCCR support)

1.1. Number of publications in Nature, Cell and Science (2001-2012)	Science:	45
	Nature:	32
	Cell:	37
	TOTAL	114

1.2. Number of publications in Nature, Cell and Science per researcher (2001-2012)

Antonarakis	12	Arber	3	Basler	10
Deplancke	1	Dermitzakis	7	Duboule	15
Gasser	9	Gonzalez	3	Hafen	5
Herr	1	Herrera	1	Laemmli	1
Lingner	6	Nef	1	Pirrota	4
Rodriguez	3	Roska	3	Schibler	12
Shore	4	Stutz	3	Thorens	1
Trono	7	Wahli	2		
		TOTAL		TOTAL	114

1.3. Some publications from the list above, as selected by the NCCR PI's as an important contribution (max. two publications per laboratory; see also item 3.1 of the report).

- *Nikolaev SI et al. Exome sequencing identifies recurrent somatic MAP2K1 and MAP2K2 mutations in melanoma. **Nature Genetics**. 2011 Dec 25;44(2):133-9.
- *Dimas AS et al. Common regulatory variation impacts gene expression in a cell type-dependent manner. **Science**. 2009 Sep 4;325(5945):1246-50.
- *Vrieseling, E., and Arber, S. (2006). Target-induced transcriptional control of dendritic patterning and connectivity in motor neurons by the ETS gene *Pea3*. **Cell**, 127, 1439-1452.
- *Pecho-Vrieseling et al. (2009). Specificity of sensory-motor connections encoded by *Sema3e*-PlexinD1 recognition. **Nature**, 459, 842-846.
- *Bischof, J. et al. (2007). An optimized transgenesis system for *Drosophila* using germ-line-specific fC31 integrases. **Proc Natl Acad Sci USA** 104, 3312-3317.
- *Hens, K. et al. Automated protein-DNA interaction screening of *Drosophila* regulatory elements. **Nature Methods**, 8:1065-70, 2011.
- *Montgomery SB. Et al. Transcriptome genetics using second generation sequencing in a Caucasian population. **Nature**. 2010 Apr 1;464(7289):773-7.
- *Soshnikova N and Duboule D. (2009) Epigenetic temporal control of mouse *Hox* genes in vivo. **Science**, 324, 1320-1323.
- *Noordermeer, D. et al. (2011) The dynamic architecture of Hox gene clusters. **Science**, 334, 222-225.
- *van Attikum, H. et al. (2004) "INO80 recruitment by H2A phosphorylation links ATP-dependent chromatin remodeling with DNA double-strand break repair." **Cell**, 119, 777 – 788.
- *Nagai, S. et al. (2008) "Functional Targeting of DNA Damage to a Nuclear Pore-associated SUMO-dependent Ubiquitin ligase" **Science** 322, 597 - 602.
- *Wartlick, O. et al. (2011) Dynamics of Dpp signalling and proliferation control. **Science**, 331:1154-1159.
- *Coumailleau, F. et al. (2009) Directional Delta and Notch trafficking in asymmetric Sara endosomes during asymmetric cell division. **Nature** 458, 1051-5.
- *Noatynska, A. et al. 2010. SPAT-1/Bora acts with Polo like kinase PLK-1 to regulate PAR polarity and cell cycle progression. **Development**, 137(19):3315-25.
- *Stocker H. et al., Rheb is an essential regulator of S6K in controlling cell growth in *Drosophila*. **Nat Cell Biol**. 2003 Jun;5(6):559-65.
- *Baumgartner R. et al. The WW domain protein Kibra acts upstream of Hippo in *Drosophila*. **Dev Cell**. 2010 Feb 16;18(2):309-16.
- *Pasi CE., et al. (2011). Genomic instability in induced stem cells. **Cell Death Differ** 18: 745-753.
- *Canella, D. et al. (2012). A Multiplicity of Factors Contributes to Selective RNA polymerase III occupancy of a Subset of RNA polymerase III Genes in Mouse Liver. (2012). **Genome Research**, doi:10.1101/gr.130286.111.
- *Capotosti, F. et al. (2011) O-GlcNAc transferase catalyzes site-specific proteolysis of HCF-1. **Cell** 144, 376–388.

- *Thorel F. et al., (2010). Conversion of adult pancreatic alpha-cells to beta-cells after extreme beta-cell loss. **Nature** 464(7292):1149-54.
- *Desgraz R. and Herrera PL. Pancreatic Neurogenin3-expressing cells are unipotent islet precursors. **Development**, 2009, 136: 3567-3574.
- *Bischof, J. et al. (2007) 'An optimized transgenesis system for Drosophila using germ-line-specific phiC31 integrases', **Proc Natl Acad Sci USA** 104(9): 3312-7.
- *Iampietro, C. et al. (2010) 'Initiator elements function to determine the activity state of BX-C enhancers', **PLoS Genet** 6(12): e1001260.
- *Ishii, K. Arib, G. Lin, C. Van Houwe G. and Laemmli U.K. (2002) Chromatin Boundaries in Budding Yeast: The Nuclear Pore Connection. *Cell*, 1009, 551-562.
- *Schmid M, Durussel T, Laemmli UK. (2004) ChlC and ChEC; genomic mapping of chromatin proteins. *Mol Cell*. 16. 147-157.
- *Teixeira, M.T. et al. (2004). Telomere length homeostasis is achieved via a switch between telomerase-extendible and -nonextendible states. **Cell** 117, 323-335.
- *Azzalin, C.M. et al. (2007). Telomeric repeat containing RNA and RNA surveillance factors at mammalian chromosome ends. **Science** 318, 798-801.
- *Huber A. et al. Sch9 regulates ribosome biogenesis via Stb3, Dot6 and Tod6 and the histone deacetylase complex RPD3L. **EMBO J.** 2011;30(15):3052-64.
- *Huber A. et al. Characterization of the rapamycin-sensitive phosphoproteome reveals that Sch9 is a central coordinator of protein synthesis **Genes Dev.** 2009;23(16):1929-43.
- *Nef, S. et al. Testis determination requires insulin receptor family function in mice. **Nature**, 2003, 426 :291-5.
- *Rivière S. et al. (2009) Formyl receptors-like are a novel family of vomeronasal chemoreceptors. **Nature**, 459, 574-7.
- *Yonehara, K., et al. Spatially asymmetric reorganization of inhibition establishes a motion-sensitive circuit. **Nature** 469, 407-410 (2011).
- *Busskamp, V., et al. Genetic reactivation of cone photoreceptors restores visual responses in retinitis pigmentosa. **Science** 329, 413-417 (2010).
- *Zbinden, M. et al. **The EMBO Journal** (2010) 29, 2659–2674. .
- *Suter, D.M. et al. (2011). Mammalian genes are transcribed with widely different bursting kinetics. **Science** 332, 472-474.
- *Bianchi, A. and Shore, D. (2007a). Early replication of short telomeres in budding yeast. **Cell** 128, 1051-1062.
- *Bianchi, A. and Shore, D. (2007b). Increased association of telomerase with short telomeres in yeast. **Genes Dev** 21, 1726-1730.
- *Spierer A. et al. (2008) SU(VAR)3-7 Links Heterochromatin and Dosage Compensation in Drosophila. **PLoS Genet** 4(5): e1000066. doi:10.1371.
- *Camblong J. et al., (2007) Antisense RNA Stabilization Induces Transcriptional Gene Silencing via Histone Deacetylation in *S. cerevisiae*. **Cell**, 131: 4, 706-717.
- *Cornu M. et al. (2009) GLP-1 Protects beta-cells against apoptosis by increasing the activity of an IGF-2/IGF1-receptor autocrine loop **Diabetes**, 58:1816-1825.
- *Mounien L. et al. (2010) Glut2-dependent Glucose Sensing Control Thermoregulation by Enhancing the Leptin Sensitivity of NPY and POMC Neurons. **FASEB J.** 24: 1747-1758.
- *Rowe, H. et al. (2010). KAP1 controls endogenous retroviruses in embryonic stem cells. **Nature**, 463: 237-240.
- *Quenneville, S. et al. (2011). In embryonic stem cells, ZFP57/KAP1 recognize a methylated hexanucleotide to affect the chromatin and DNA methylation of imprinting control regions. **Mol. Cell**, 44: 361-372.
- *Leuenberger N. et al. (2009) Sumoylated PPARalpha mediates sex-specific gene repression and protects the liver from estrogen-induced toxicity in mice. **J Clin Invest.** 119:3138-48, 2009.
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