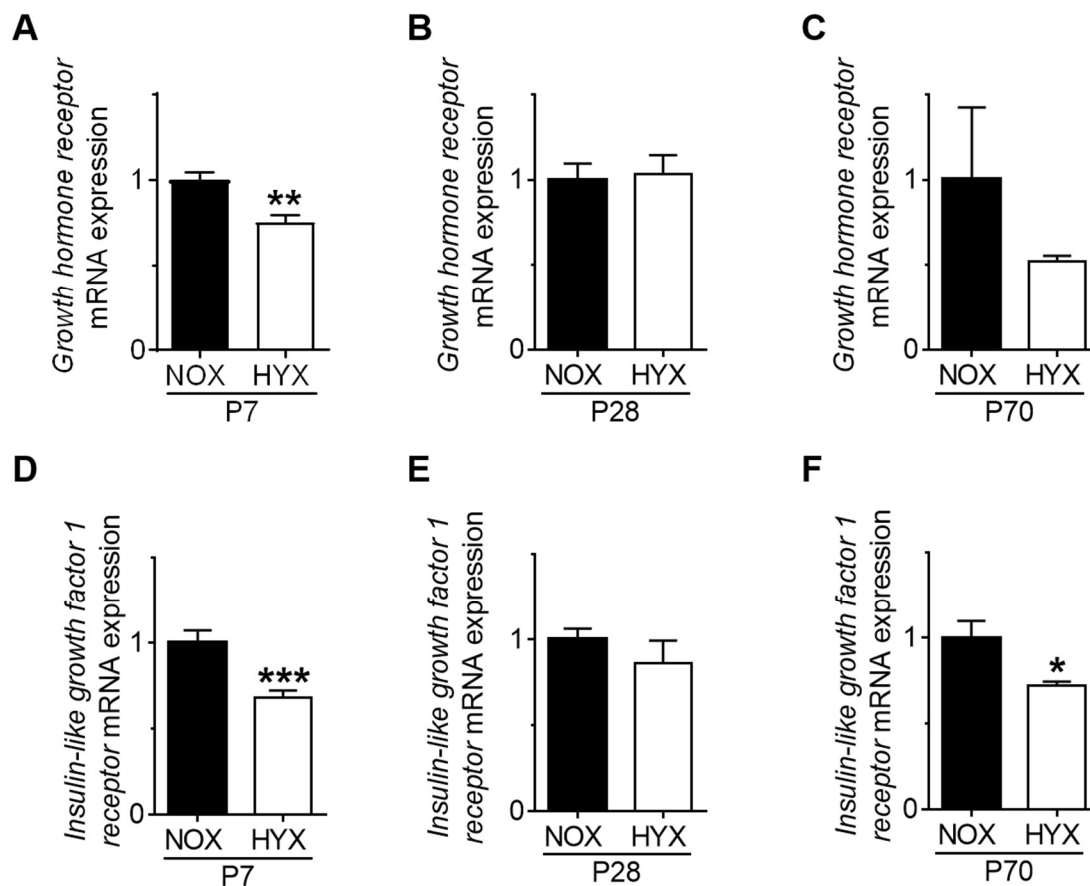
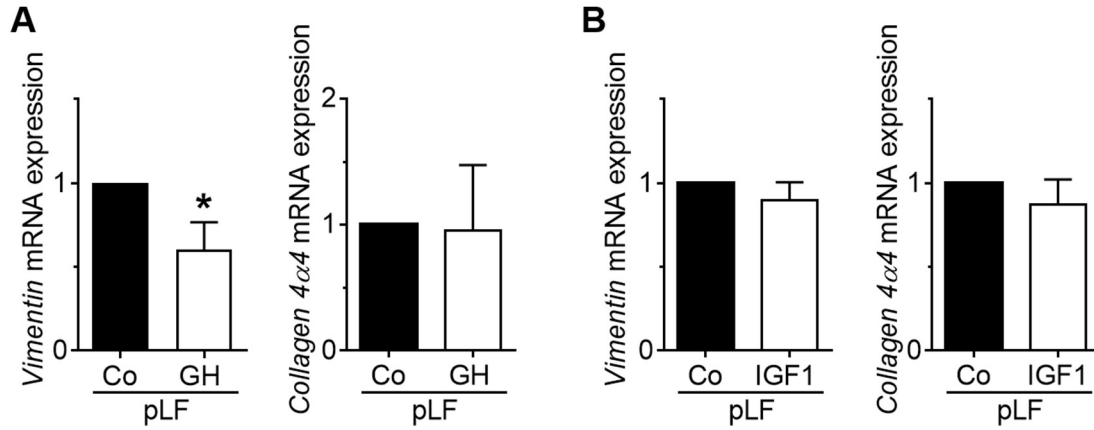


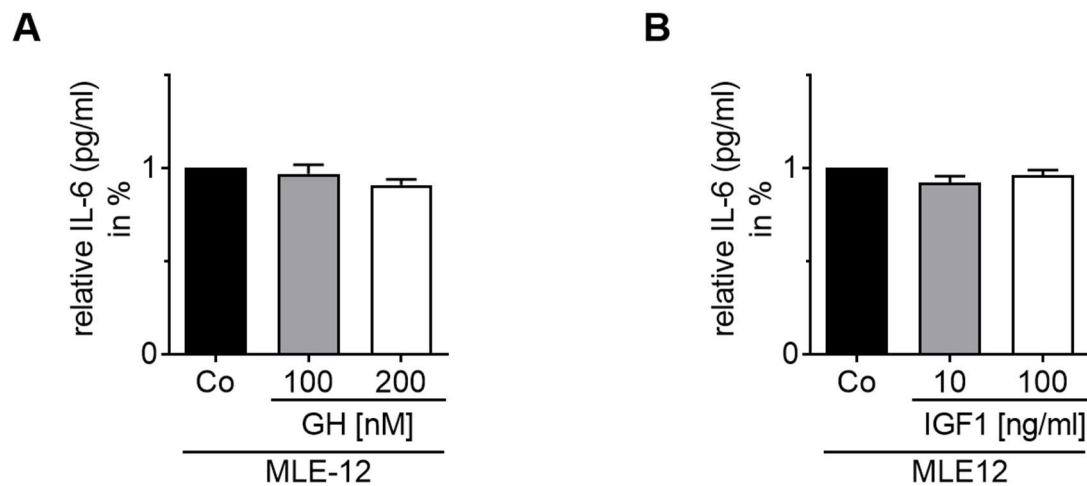
Supplementary Materials:



**Supplementary Figure S1.** Gene expression of growth hormone receptor (*Ghr*) and insulin-like growth factor 1 receptor (*Igf1r*) in murine lungs of mice exposed to room air (normoxia, NOX, 21 % O<sub>2</sub>) or hyperoxia (HYX, 85 % O<sub>2</sub>) from birth until postnatal day 7 (P7) or P28 using qRT-PCR. A-C: Measurement of lung *Ghr* mRNA at P7 (A), P28 (B), and P70 (C). D-F: Assessment of lung *Igf1r* mRNA at P7 (D), P28 (E), and P70 (F);  $\beta$ -Actin served as housekeeping gene. Data are presented as mean $\pm$ SEM. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001 (Unpaired t test); n=10-12/group.



**Supplementary Figure S2.** Functional role of Growth Hormone (GH) and Insulin-like growth factor (IGF-1) in gene expression of primary neonatal lung fibroblasts (pLF). A, B: pLF were stimulated for 24 h with either GH (100 nmol/l) (A) or IGF-1 (10 ng/ml) (B), and their respective vehicles (10 mmol sodium bicarbonate or dH<sub>2</sub>O). Gene expression of Vimentin (*Vim*) and Collagen 4α4 (*Col4a4*) was analyzed; β-Actin served as housekeeping gene. Data are presented as mean±SEM. \*p<0.05 (Unpaired t test); n=6/group.



**Supplementary Figure S3.** A, B. Functional role of Growth Hormone (GH) (A) and Insulin-like growth factor (IGF-1) (B) on IL-6 secretion of murine lung epithelial cells (MLE-12). IL-6 protein abundance in cell supernatant was measured with ELISA, data are presented as mean $\pm$ SEM. (RM One-way ANOVA with Bonferroni post-test); n=4/group.

**Supplementary Table S1.** List of primers used for real-time RT-PCR; \*SYBR-Green primer.

<i>A-smooth muscle actin (Acta 2)</i>	Forward, ACATCAGGGAGTAATGGTTGGAAT
	Reverse, GGTGCCAGATCTTTTCCATGTC
	Probe (FAM), CGATAGAACACGGCATCATCACCAACTG (TAMRA)
* <i>Actb</i>	Forward, TGACAGGATGCAGAAGGAGATTACT
	Reverse, GCCACCGATCCACACAGAGT
<i>Actb</i>	Forward, TGACAGGATGCAGAAGGAGATTACT
	Reverse, GCCACCGATCCACACAGAGT
	Probe (FAM), ATCAAGATCATTGCTCCTCCTGAGCGC (TAMRA)
* <i>Collagen 1a1 (Coll1a1)</i>	Forward, GCAGTGCTGTTGCGATCTTG
	Reverse, CAGAGGGACAGAGCACAGCTT
<i>Collagen 4a4 (Col4a4)</i>	Forward, GAAGGCGCACAAATCAAGATCT
	Reverse, CACACTTGGTGGATGTTGCAGTA
	Probe (FAM), CTTCTGTGTTTAGCACTCTGCCCTTTGC
* <i>Collagen 6a1 (Col6a1)</i>	Forward, GGTGGCCACACAGGACATC
	Reverse, GGTGTGCGAGCACGAAGAATAGA
* <i>Growth hormone receptor (Ghr)</i>	Forward, CAAAAATGTTTCACTGTTGACGAAA
	Reverse, GAATCCCGGTCAAATAATGTTTAG
	Forward, CGGAGGACCAGGTGGAGAT

<i>*Homeodomain-only protein homeobox (Hox)</i>	Reverse, GCGCTGCTTAAACCATTTCTG
<i>*Insulin growth factor binding protein 2 (Igfbp2)</i>	Forward, GCCCCCTGGAACATCTCTACT
	Reverse, AGAGACATCTTGCACTGCTTAAGGT
<i>Insulin-like growth factor 1 (Igf1)</i>	Forward, GCTGGTGGATGCTCTTCAGTT
	Reverse, GGTGCCCTCCGAATGCT
	Probe (FAM), TTTTACTTCAACAAGCCCACAGGCTATGGC
<i>*Insulin-like growth factor 1 receptor (Igf1r)</i>	Forward, GCTTCCTGTGAAAGTGATGTTCTC
	Reverse, CGTTTTTAAATGGTGCCTCCTT
<i>Interleukin 6 (Il6)</i>	Forward, ACAAGTCGGAGGCTTAATTACACAT
	Reverse, AATCAGAATTGCCATTGCACAA
	Probe (FAM), TCTTTTCTCATTTCCACGATTTCCCAGAGAA
<i>*Vimentin (Vim)</i>	Forward, CCCTGAACCTGAGAGAACTAACC
	Reverse, GTCTCATTGATCACCTGTCCATCT
<i>*Zonula occludens 1 (Tjp1)</i>	Forward, CCTGTCCCTCAGAGTCAGTTTAGTG
	Reverse, CAATATCTTCGGGTGGCTTCA