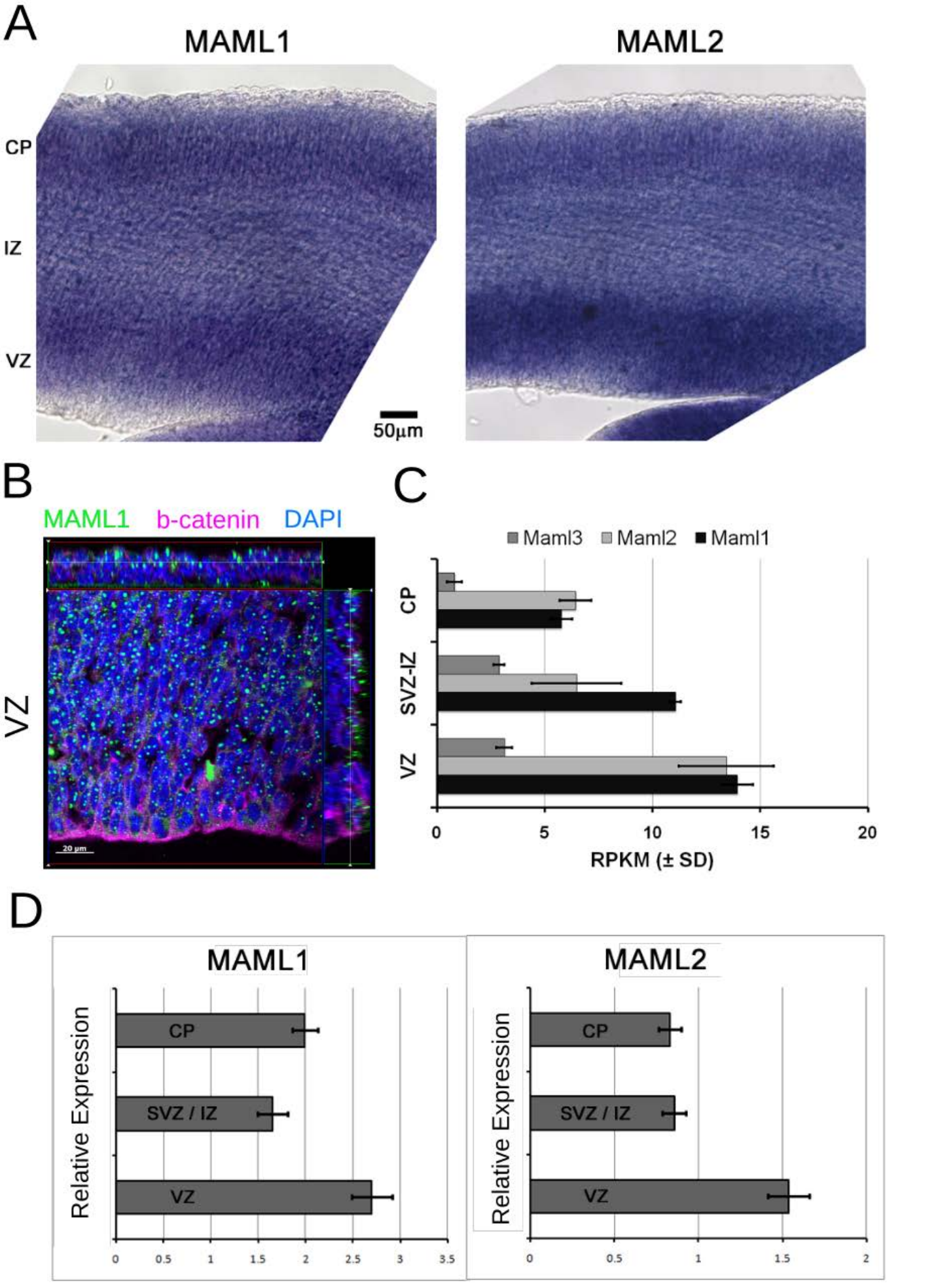
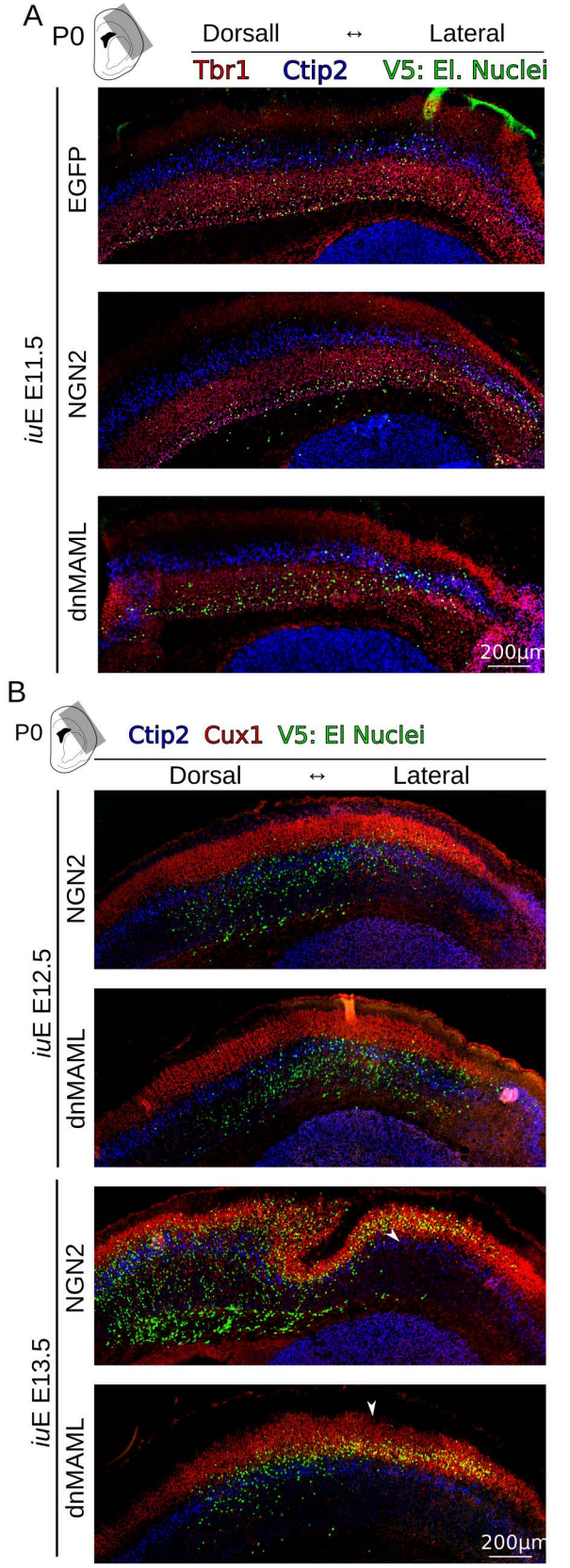
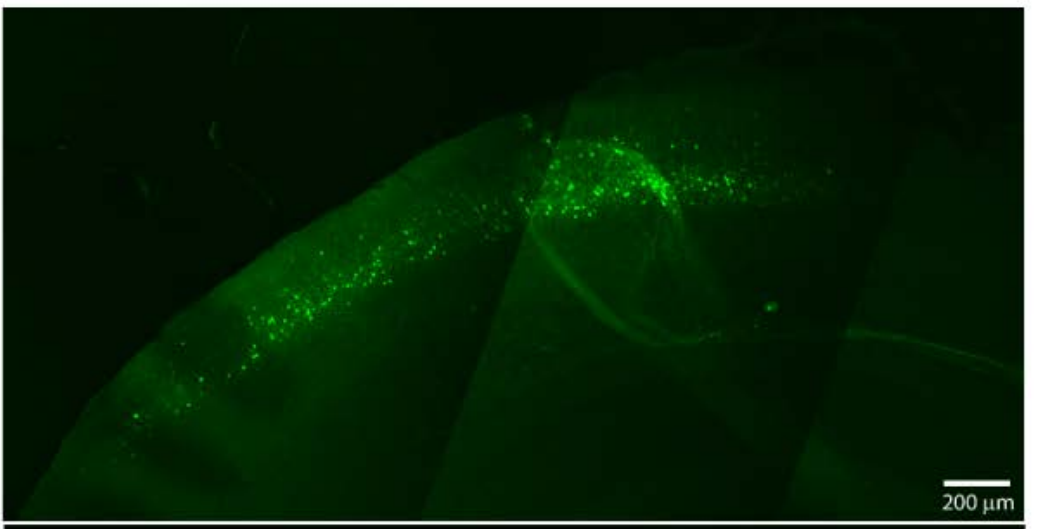

A
MAML1
MAML2
CP
IZ
VZ
50µm
B
MAML1 b-catenin DAPI
VZ
20 µm
C
Maml3 Maml2 Maml1
CP
SVZ-IZ
VZ
0 5 10 15 20
RPKM (± SD)
D
MAML1
Relative Expression
CP
SVZ / IZ
VZ
0 0.5 1 1.5 2 2.5 3 3.5
MAML2
Relative Expression
CP
SVZ / IZ
VZ
0 0.5 1 1.5 2


A
P0
Dorsall
↔
Lateral
Tbr1
Ctip2
V5: El. Nuclei
iuE E11.5
EGFP
NGN2
dnMAML
200µm
B
P0
Ctip2
Cux1
V5: El Nuclei
Dorsal
↔
Lateral
iuE E12.5
NGN2
dnMAML
iuE E13.5
NGN2
dnMAML
200µm

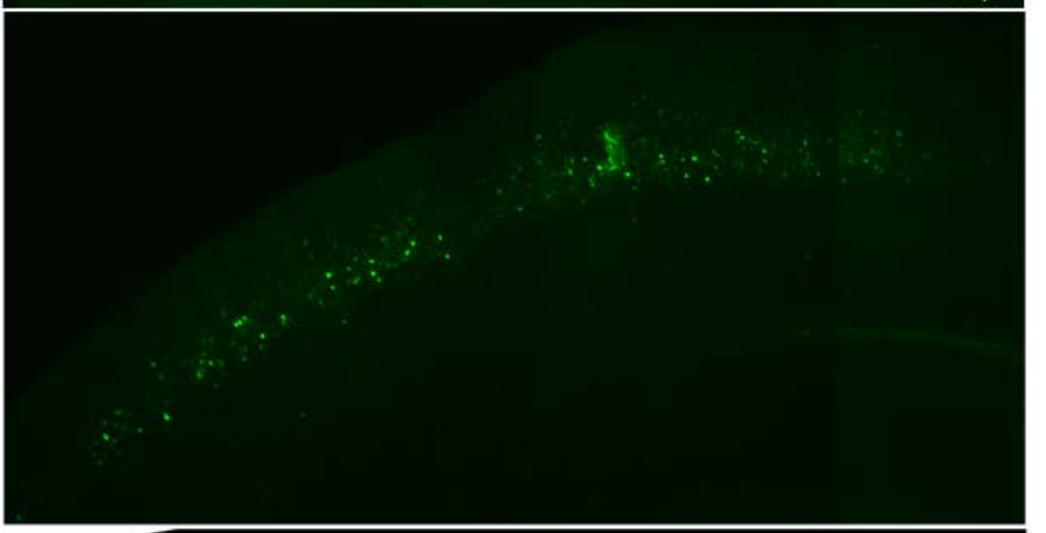
P21
*iu*E E14.5

Lateral ↔ Dorsal

dnMAML



NGN2



EGFP

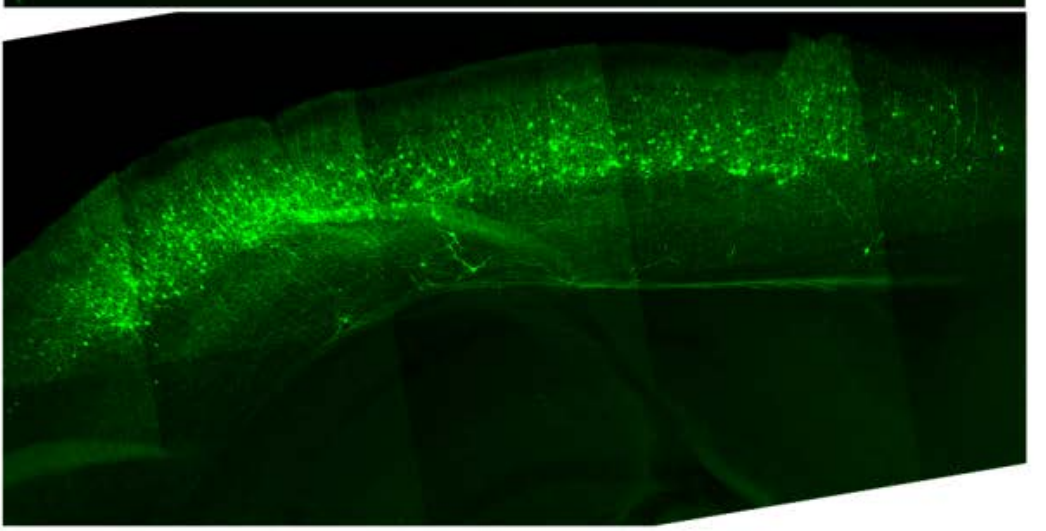


Figure Legend Supplementary Figures

Figure S1. MAML expression and Loss-of-function

A. Confocal z-stack showing immunohistochemistry for MAML1, b-catenin, and DAPI stained nuclei in E14.5 mouse ventricular zone (VZ). **B.** Graph shows mRNAseq expression of MAML1, 2, and 3 mRNAs in the mouse neocortex at E14.5. RPKM is reads per kilobase per million base pairs sequenced, +/- standard deviation. . Analysis of mRNAseq data shows that MAML1 and 2/3 mRNAs are expressed in the mouse neocortex from E11.5 to E17.5. ***B***, Confocal images show immunostaining for MAML1 in the mouse neocortex at E14.5. ***C***, Confocal images show immunostaining for MAML1 in the human dorsal cortex at E56. Cryosections were counterstained with Hoechst to highlight nuclei, Pax6 for progenitors, and Tbr2 for intermediate progenitors. Insets on the right show higher magnification views of the ventricular zone (VZ), subventricular zone (SVZ), and outer SVZ (oSVZ). Scale bar = 20um.

Figure S2. Forced neurogenesis exposes regional gradient in intrinsic fate clock.

A. Comparing the long-term effects of dnMAML to NGN2 (Neurogenin2), and control EGFP on cortical development. Embryos were electroporated at E11.5 then sacrificed at P0. To ascertain co-localization of Tbr1 or Ctip2, we stained sections for the nuclear V5 (Green); Overexpression of either NGN2 or dnMAML drives neurogenesis and of differentiation of neurons. The overview panel exposes a regional gradient in the destination of neurons born on the same day. Most cells in the dorsal medial aspect of the cortex settle in the deep layers. On the lateral aspect of the cortex, cells electroporated at E11.5 reach layer IV. Scale bar 200 µm.

B. *In utero* electroporations were carried out in E12.5 or E13.5 mouse embryo forebrain; embryos were harvested at P0. Electroporations at E12.5 of either dnMAML or NGN2 seen in coronal sections of dorsal cortex at P0 with nuclear V5 (Green) labeling; The overexpression of either NGN2 or dnMAML drives the radial migration of differentiating neurons, however, the final destination of neurons depends on the region of birth. Immunohistochemistry for the layer markers Ctip2 and Cux 1 demonstrates regional spread in the destination of neurons born at E12.5 and E13.5. Scale bar 200 µm.

Figure S3. Panoramic view exposes regional gradient in intrinsic fate.

Comparing the long-term effects of dnMAML to NGN2 (Neurogenin2), and control EGFP on cortical development. Embryos were electroporated at E14.5 then sacrificed at P21. Overexpression of either NGN2 or dnMAML drives neurogenesis and of differentiation of neurons. The overview panel exposes a regional gradient in the destination of neurons born on the same day. Cells born at E14.5 settle in layer IV on the dorsal medial aspect of the cortex and upper layers on the lateral aspect of the cortex. Scale bar 200 µm.