

**Dr. Eric M. Rouiller**

**LIST OF PUBLICATIONS**

**I. Full length Research Papers (\*peer-reviewed contributions)**

**128\*** Gallay D.S., Gallay M.N., Jeanmonod D., Rouiller E.M. and Morel A. (2011) The insula of Reil revisited: multiarchitectonic organization in macaque monkeys. *Cerebral Cortex* (in press).

**127\*** Bashir S.\*, Kaeser M.\*, Wyss A.F.\*, Hamadjida A.\*, Liu Y., Bloch J., Brunet J.F., Belhaj-Saif A., and **Rouiller E.M.** (2011) Short-term effects of unilateral lesion of the primary motor cortex (M1) on ipsilesional hand dexterity in adult macaque monkeys. *Brain Structure and Function* (in press).

\* Equal first authorship

**126\*** Bloch J., Kaeser M., Sadeghi Y., **Rouiller E.M.**, Redmond D.E., Jr. and Brunet J.F. (2010) Doublecortin-positive cells in the adult primate cerebral cortex and possible role in brain plasticity and development. *J. Comp. Neurol.* 519: 775-789. [\[Abstract\]](#)

**125\*** Kaeser M\*., Brunet J.F\*., Wyss A.F., Belhaj-Saïf A., Liu Y., **Rouiller E.M.**<sup>+</sup> and Bloch J.<sup>+</sup> (2010) Autologous adult cortical cell implantation enhanced functional recovery of manual dexterity after unilateral lesion of motor cortex in non-human primates. *Neurosurgery* 68:1405-1417. [\[Abstract\]](#)

\* Equal first authorship

+Equal senior authorship

**124\*** Kaeser M., Wyss A.F., Bashir S., Hamadjida A., Liu Y., Bloch J., Brunet J.F., Belhaj-Saif A., **Rouiller E.M.** (2010) Effects of unilateral motor cortex lesion on ipsilesional hand's reach and grasp performances in monkeys: relationship with recovery in the contralesional hand. *J. Neurophysiol.* 103: 1630-1645. [\[Abstract\]](#) [\[pdf\]](#)

**123\*** Cappe C., Murray M.M., Barone P. and **Rouiller E.M.** (2010) Multisensory facilitation of behavior in monkeys: effects of stimulus intensity. *J. Cognitive Neurosciences J. Cogn. Neurosci.* 22: 2850-2863. [\[Abstract\]](#)

**122\*** Schmidlin E.\*, Jouffrais C.\*, Freund P., Wannier P., Beaud M.-L., **Rouiller E.M.** and Wannier T. (2009) A case of polymicrogyria in macaque monkey: impact on anatomy and function of the motor system. *BMC Neuroscience* 10: 155. [\[Abstract\]](#) [\[pdf\]](#)

**121\*** Cappe, C., **Rouiller E.M.** and Barone P. (2009) Multisensory anatomical pathways. *Hearing Res.* 258: 28-36. [\[Abstract\]](#)

**120\*** Freund, P.\*, Schmidlin, E.\*, Wannier T.\*, Bloch J., Mir A., Schwab M.E. and **Rouiller E.M.** (2009) Anti-Nogo-A antibody treatment promotes recovery of manual dexterity after

unilateral cervical lesion in adult primates: re-examination and extension of behavioral data. *Europ. J. Neurosci.* 29: 983-996. [\[Abstract\]](#) [\[pdf\]](#)

**119\*** Cappe C., Morel A., Barone C. and **Rouiller E.M.** (2009) The thalamocortical projection systems in primate: an anatomical support for multisensory and sensorimotor interplay. *Cerebral Cortex* 19: 2025-2037. [\[Abstract\]](#) [\[pdf\]](#)

**118\*** Spicher C.J., Ribordy F., Mathis F., Desfoux N., Schönenweid F. and **Rouiller E.M.** (2008) L'allodynie mécanique masque une hypoesthésie: observations topographiques de 23 patients douloureux neuropathiques chroniques. *Douleur et Analgésie* 21: 239-251.

**117\*** Beaud M.L.\*, Schmidlin, E.\*, Wannier T.\*, Freund, P., Bloch J., Mir A., Schwab M.E. and **Rouiller E.M.** (2008) Anti-Nogo-A antibody treatment does not prevent cell body shrinkage in the motor cortex in adult monkeys subjected to unilateral cervical cord lesion. *BMC Neuroscience* 9: 5. [\[Abstract\]](#) [\[pdf\]](#)

**116\*** Spicher C.J., Mathis F., Degrange B., Freund P. and **Rouiller E.M.** (2008) Static Mechanical Allodynia (SMA) is a Paradoxical Painful Hypoaesthesia: Observations derived from neuropathic pain patients treated with somatosensory rehabilitation. *Somat. Mot. Res.* 25: 77-92. [\[Abstract\]](#)

**115\*** Wannier-Morino P. <sup>+</sup>, Schmidlin E. <sup>+</sup>, Freund P., Belhaj-Saif A., Bloch J., Mir A., Schwab M.E., **Rouiller E.M.** and Wannier T. (2008) Fate of rubrospinal neurons after unilateral section of the cervical spinal cord in adult macaque monkeys: effects of an antibody treatment neutralizing Nogo-A. *Brain Res.* 1217: 96-109. [\[Abstract\]](#)

**114\*** Cappe C., Morel A. and **Rouiller E.M.** (2007) Thalamocortical and the dual pattern of corticothalamic projections of the posterior parietal cortex in macaque monkeys. *Neuroscience* 146: 1371-1387. [\[Abstract\]](#)

**113\*** Courtine G., Bunge M.B., Fawcett J.W., Grossman R.G., Kaas J.H., Lemon R., Maier I., Martin J.H., Nudo R.J., Ramon-Cueto A., **Rouiller E.M.**, Schnell L., Wannier T., Schwab M.E. and Edgerton V.R. (2007) Can experiments in nonhuman primates expedite the translation of treatments for spinal cord injury in humans? *Nat. Med.* 13(5): 561-566. [\[Abstract\]](#)

**112\*** Meyer K., **Rouiller E.M.** and Loquet G. (2007) Direct comparison between properties of adaptation of the auditory nerve and the ventral cochlear nucleus in response to repetitive clicks. *Hearing Research* 228: 144-155. [\[Abstract\]](#)

**111** Büchli A.D., **Rouiller E.M.**, Mueller R., Dietz V. and Schwab M.E. (2007) Repair of the injured spinal cord. *Neurodegenerative Diseases* 4, 51-56.

**110\*** Freund P., Wannier T., Schmidlin E., Bloch J., Mir A., Schwab M.E. and **Rouiller E.M.** (2007) Anti-Nogo-A antibody treatment enhances sprouting of corticospinal axons rostral to a

unilateral cervical spinal cord lesion in adult macaque monkey. *J. Comp. Neurol.* 502: 644-659. [\[Abstract\]](#)

**109\*** Rouiller E.M., Wannier T., Schmidlin E. and Liu Y (2006) Reprogramming the motor cortex for functional recovery after neonatal or adult unilateral lesion of the corticospinal system in the macaque monkey. In: *Reprogramming the Cerebral Cortex, Plasticity Following Central and Peripheral Lesions*, Eds., Lomber S. and Eggermont J., Oxford University Press, Oxford, New-York, pp. 309-324.

**108\*** Freund P., Schmidlin E., Wannier T., Bloch J., Mir A., Schwab M.E. and **Rouiller E.M.** (2006) Anti-Nogo-A treatment enhances corticospinal tract sprouting and functional recovery after unilateral cervical lesion in adult primates. *Nat. Med.* 12 (7): 790-792. [\[Abstract\]](#)

**107\*** Weinmann O., Schnell L., Gosh A., Montani L., Wiessner Ch., Wannier T., **Rouiller E.M.**, Mir A. and Schwab M.E. (2006) Intrathecally infused antibodies against Nogo-A penetrate the CNS and downregulate the endogenous neurite growth inhibitor Nogo-A. *Mol. and Cell. Neurosci.* 32: 161-173. [\[Abstract\]](#)

**106\*** Boussaoud D, Tanné-Gariépy J, Wannier T. and **Rouiller E.M.** (2005) Callosal connections of dorsal versus ventral premotor areas in the macaque monkey: a multiple retrograde tracing study. *BMC Neuroscience* 6: 67. [\[Abstract\]](#)

**105\*** Brunet J.F., **Rouiller E.M.**, Wannier T., Villemure J.G. and Bloch J. (2005) Primate adult brain cell autotransplantation, a new tool for brain repair? *Exp. Neurol.* 196: 195-198. [\[Abstract\]](#)

**104** Spicher C.J., Hecker E., Thommen E. and **Rouiller E.M.** (2005) La place du test de discrimination de 2 points statiques dans l'examen clinique. *Doul. et Analg.* 2, 73-78.

**103\*** Schmidlin E., Wannier T., Bloch J., Belhaj-Saif A., Wyss A. and **Rouiller E.M.** (2005) Reduction of the hand representation in the ipsilateral primary motor cortex following unilateral section of the corticospinal tract at cervical level in monkeys. *BMC Neuroscience* 2005,6:56. [\[Abstract\]](#)

**102\*** Morel A., Liu J., Wannier T., Jeanmonod D. and **Rouiller E.M.** (2005) Divergence and convergence of thalamocortical projections to premotor and supplementary motor cortex: a multiple tracing study in macaque monkey. *Europ. J. Neurosci.* 21 1007-1029. [\[Abstract\]](#)

**101\*** Wannier T., Schmidlin E., Bloch J. and **Rouiller E.M.** (2005) A unilateral section of the corticospinal tract at cervical level in primate does not lead to measurable cell loss in motor cortex. *J. Neurotrauma* 22, 703-717. [\[Abstract\]](#)

**100\*** Schmidlin E., Wannier T., Bloch J. and **Rouiller E.M.** (2004) Progressive plastic changes in the hand representation of the primary motor cortex parallels incomplete recovery from a unilateral section of the corticospinal tract at cervical level in monkeys. *Brain Res.* 1017: 172-183. [[Abstract](#)]

**99\*** **Rouiller E.M.**, Durif C. (2004) The dual pattern of corticothalamic projection of the primary auditory cortex in macaque monkey. *Neurosci. Letters* 2004 Mar 18;358(1):49-52. [[Abstract](#)]

**98\*** Loquet G., Pelizzone M., Valentini G., **Rouiller E.M.** (2004) Matching the neural adaptation in the rat ventral cochlear nucleus produced by artificial (electric) and acoustic stimulation of the cochlea. *Audiology & Neuro-Otology*. 2004 May-Jun;9(3):144-59. [[Abstract](#)]

**97\*** **Rouiller E.M.** and E. Olivier (2003) Functional recovery after lesions of the primary motor cortex. In : *Progress in Brain Research*, S. Mori, D.G. Stuart, M. Wiesendanger (Eds), Chapter 44; Elsevier B.V., pp. 467- 475. [[Abstract](#)]

**96\*** Babalian A., Ryugo D.K. and **Rouiller E.M.** (2003) Discharge properties of identified cochlear nucleus neurons and auditory nerve fibers in response to repetitive electrical stimulation of the auditory nerve. *Exp. Brain Res.* 2003 Dec;153(4):452-60. [[Abstract](#)]

**95\*** Durif C., Jouffrais C. and **Rouiller E.M.** (2003) Single unit responses in the auditory cortex of monkeys performing a conditional acoustico-motor task. *Exp. Brain Res.* 153, 614-627. [[Abstract](#)]

**94\*** Jacomme A.V., Nodal F.R., Bajo V.M., Manunta Y., Edeline J.M., Babalian A., and **Rouiller E.M.** (2003) The Projection from auditory cortex to cochlear nucleus in guinea pigs: an in vivo anatomical and in vitro electrophysiological study. *Exp. Brain Res.* 153, 467-476. [[Abstract](#)]

**93\*** **Rouiller E.M.**, Wannier T. and A. Morel (2003) The dual pattern of corticothalamic projection of the premotor cortex in macaque monkeys. *Thalamus and Related Structures* 2 (3): 189-197.

**92\*** Loquet G., Meyer K. and **E.M. Rouiller** (2003) Effects of intensity of repetitive acoustic stimuli on neural adaptation in the ventral cochlear nucleus of the rat. *Exp. Brain Res.* 153, 436-442. [[Abstract](#)]

**91\*** Vandermeeren, Y., E. Bastings, D. Good, **E. Rouiller** and E. Olivier (2003) Plasticité des aires motrices corticales: progrès récents et perspectives thérapeutiques. *Rev. Neurol.* 159, 259-275. [[Abstract](#)]

**90\*** Tanné-Gariépy, J., D. Boussaoud and **E.M. Rouiller** (2002) Projections of the claustrum to the primary motor, premotor and prefrontal cortices in the macaque monkey. *J. Comp. Neurol.* 454, 140-157. [\[Abstract\]](#)

**89\*** Tanné, J., **E.M. Rouiller** and D. Boussaoud (2002) Parietal Inputs to Dorsal versus Ventral Premotor Areas in the Macaque monkey: Evidence for largely Segregated Visuomotor Pathways. *Exp. Brain Res.* 145, 91-103. [\[Abstract\]](#)

**88\*** Babalian, A., A.V. Jacomme, J.R. Doucet, D.K. Ryugo and **E.M. Rouiller** (2002) Bushy and stellate cells of the anteroventral cochlear nucleus are under inhibitory glycinergic influence from the contralateral cochlear nucleus. *Neuroreport* 13, 555-558. [\[Abstract\]](#)

**87\*** Loquet, G. and **E.M. Rouiller** (2002) Neural adaptation to pulsatile acoustical stimulation in the cochlear nucleus of the rat. *Hearing Res.* 171, 72-81. [\[Abstract\]](#)

**86\*** Wannier, T., J. Liu, A. Morel, C. Jouffrais and **E.M. Rouiller** (2002) Neuronal activity in primate striatum and pallidum related to bimanual motor actions. *Neuroreport* 13, 143-147. [\[Abstract\]](#)

**85\*** Liu, J., A. Morel, T. Wannier and **E.M. Rouiller** (2002) Origins of callosal projection to the supplementary motor area (SMA): a direct comparison between pre-SMA and SMA-proper in macaque monkeys. *J. Comp. Neurol.* 443, 71-85. [\[Abstract\]](#)

**84\*** **Rouiller, E.M.** and E. Welker (2000) A comparative analysis of the morphology of corticothalamic projections in mammals. *Brain Res. Bull.* 53, 727-741. [\[Abstract\]](#)

**83\*** Kermadi, I., Y. Liu and **E.M. Rouiller** (2000) Do bimanual motor actions involve the dorsal premotor (PMd), cingulate (CMA) and posterior parietal (PPC) cortices ? Comparison with primary and supplementary motor cortical areas. *Somatosens. and Motor Res.* 17, 255-271. [\[Abstract\]](#)

**82\*** Carretta, D., A. Hervé-Minvielle, V. Bajo, A.E.P. Villa and **E.M. Rouiller** (1999) c-Fos expression in the auditory pathways related to the significance of acoustic signals in rats performing a sensory-motor task. *Brain Res.* 841, 170-183. [\[Abstract\]](#)

**81\*** Liu, Y. and **E.M. Rouiller** (1999) Mechanisms of recovery of dexterity following unilateral lesion of the sensorimotor cortex in adult monkeys. *Exp. Brain Res.* 128, 149-159. [\[Abstract\]](#)

**80\*** Babalian, A.L., D.K. Ryugo, M.W. Vischer and **E.M. Rouiller** (1999) Inhibitory synaptic interactions between cochlear nuclei : evidence from an in vitro whole brain study. *Neuroreport* 10, 1913-1917. [\[Abstract\]](#)

**79\*** Rouiller, E.M., J. Tanné, V. Moret and D. Boussaoud (1999) Origin of thalamic inputs to the primary, premotor and supplementary motor cortical areas and to area 46 in macaque monkeys: a multiple retrograde tracing study. *J. Comp. Neurol.* 409, 131-152. [\[Abstract\]](#)

**78\*** Kazennikov, O., Hyland, B., Corboz, M., Babalian, A., Rouiller, E.M. and M. Wiesendanger (1999) Neural activity of supplementary and primary motor areas in monkeys and its relation to bimanual and unimanual movement sequences. *Neuroscience* 89, 661-674. [\[Abstract\]](#)

**77\*** Carretta, D., A. Hervé-Minvielle, V. Bajo, A.E.P. Villa and E.M. Rouiller (1999) Preferential induction of Fos-like immunoreactivity (FLI) in granule cells of the cochlear nucleus by acoustic stimulation in behaving rats. *Neurosci. Lett.* 259: 123-126. [\[Abstract\]](#)

**76** Rouiller, E.M. (1998) Rôle des différents relais des voies auditives centrales dans le traitement de l'information acoustique. *Rencontre IPSEN en ORL (Paris, 1997), Tome 2*, Editions Irwinn, eds Y. Christen, L. Collet, M.T. Droy-Lefaix, pp. 53-70.

**75\*** Kermadi, I., Y. Liu, A. Tempini, E. Calciati and E.M. Rouiller (1998) Neuronal activity in the primate supplementary motor area and the primary motor cortex in relation to spatio-temporal bimanual coordination. *Somatosens. and Motor Res.* 15: 287-308. [\[Abstract\]](#)

**74\*** Bajo, V.M., A.E.P. Villa, F. de Ribaupierre and E.M. Rouiller (1998) Discharge properties of single neurons in the dorsal nucleus of the lateral lemniscus (DNLL) of the rat. *Brain Res. Bull.* 47, 595-610. [\[Abstract\]](#)

**73** Wiesendanger, M. and E.M. Rouiller (1998) Mechanisms of functional recovery following motor cortical lesions. In: eds E.V. Stålberg, A.W. De Weerd and J. Zidar, 9th European Congress of Clinical Neurophysiology, Ljubljana, Slovenia, 3-7 June 1998, Monduzzi Editore SpA Bologna (Italia), pp. 343-348.

**72\*** Kazennikov, O., Hyland, B., Wicki, U., Perrig, S., Rouiller, E.M. and M. Wiesendanger (1998) Effects of lesions in the mesial frontal cortex on bimanual coordination in monkeys. *Neuroscience* 85, 703-716. [\[Abstract\]](#)

**71\*** Haenggeli, A., Zhang, J., Vischer, M., Pelizzone, M., and E.M. Rouiller (1998) Electrically evoked compound action potential (ECAP) of the auditory nerve in response to pulsatile electrical stimulation of the cochlea in the rat: effects of stimulation at high rates. *Audiology* 37, 353-371. [\[Abstract\]](#)

**70\*** Zhang, J.S., Vischer, M.V., Moret, V., Roulin, C. and E.M. Rouiller (1998) Antibody-dependent Fos-like immunoreactivity (FLI) in the auditory pathway of the rat in response to electric stimulation of the cochlea. *J. of Brain Res.* 39, 21-35. [\[Abstract\]](#)

**69\*** Rouiller, E.M., Tanné, J., Moret, V., Kermadi, I., Boussaoud, D., and E. Welker (1998) Dual morphology and topography of the corticothalamic terminals originating from the primary, supplementary motor and dorsal premotor cortical areas in macaque monkeys. *J. Comp. Neurol.* 396, 169-185. [\[Abstract\]](#)

**68\*** Rouiller, E.M., Yu, X.Y., Moret, V., Tempini, A., Wiesendanger, M., and F. Liang (1998) Dexterity in adult monkeys following early lesion of the motor cortical hand area: the role of the cortex adjacent to the lesion. *Europ. J. Neurosci.* 10, 729-740. [\[Abstract\]](#)

**67\*** Kermadi, I., Liu, Y., Tempini, A. and **E.M. Rouiller** (1997) Effects of reversible inactivation of the supplementary motor area (SMA) on unimanual grasp and bimanual pull and grasp performance in monkeys. *Somatosens. and Motor Res.* 14, 268-280. [\[Abstract\]](#)

**66** Zhang, J.S., Vischer, M.W., Haenggeli, C.A. and **E.M. Rouiller** (1997) Responses of the auditory nerve to high rate pulsatile electrical stimulation: comparison between normal and deafened rats. In: *Acoustical signal processing in the central auditory system*. Ed. J. Syka, Plenum Press, New-York and London, pp. 577-583.

**65** Herve-Minvielle, A., Carretta, D., Bajo, V.M., Villa A.E.P. and **E.M. Rouiller** (1997) Evolution of c-fos expression in auditory structures during a sensori-motor learning in rats. In: *Acoustical signal processing in the central auditory system*. Ed. J. Syka, Plenum Press, New-York and London, pp. 49-55.

**64** Rouiller, E.M. (1997) Mapping activity in the auditory pathway with c-fos. In: *Acoustical signal processing in the central auditory system*. Ed. J. Syka, Plenum Press, New-York and London, pp. 33-48.

**63\*** Vischer, M., A. Haenggeli, J. Zhang, M. Pelizzone, R. Häusler and **E.M. Rouiller** (1997) Effect of high-frequency electrical stimulation of the auditory nerve in an animal model of cochlear implants. *The Amer. J. of Otol.* 18, S27-S29. [\[Abstract\]](#)

**62** Wiesendanger, M., O. Kazennikov, S. Perrig, **E.M. Rouiller** and I. Kermadi (1997) Reaching, grasping, and bimanual coordination with special reference to the posterior parietal cortex. In: *Parietal lobe contributions to orientation in 3D space*. Eds P. Thier and H.O. Karnath, Springer Verlag (Berlin), pp. 271-288.

**61\*** Rouiller, E.M., X.H. Yu and A. Tempini (1997) Effect of inactivation of M1 and SMA on precision grip performance in monkeys. In: *Perspectives of motor Behavior and its Neural Basis*. Eds M.C. Hepp-Reymond and G. Marini, Karger (Basel), pp. 34-43.

**60\*** **E.M. Rouiller** (1997) Functional organization of the auditory pathways. In: *The central auditory system*, Eds. G. Ehret and R. Romand, Oxford University Press, pp. 3-65.

**59\*** Vischer, M., V. Bajo, J.S. Zhang, E. Calciati, C.A. Haenggeli and **E.M. Rouiller** (1997) Comparison of single unit activity in the inferior colliculus of the rat elicited by acoustic and electric stimulation of the cochlea. *Audiology* 36, 202-227. [\[Abstract\]](#)

**58** Wiesendanger, M., **E.M. Rouiller**, O. Kazennikov and S. Perrig (1996) Is the supplementary motor area a bilaterally organized system ? *Advances in Neurology*, Vol. 70: Supplementary motor area, ed. H.O. Lüders. Lippincott-Raven Publishers, Philadelphia, pp. 85-93. [\[Abstract\]](#)

**57\*** **Rouiller, E.M.**, V. Moret, J. Tanné and D. Boussaoud (1996) Does the hand representation of the supplementary motor cortical area make direct contacts with cervical motoneurons ? *Europ. J. Neurosci.* 8, 1055-1059. [\[Abstract\]](#)

**56** **E.M. Rouiller** (1996) Multiple hand representations in the motor cortical areas. In: *Hand and Brain: Neurophysiology and Psychology of hand movement*, Eds P. Haggard, R. Flanagan and A. Wing, Academic Press, pp. 99-124.

**55\*** Tanné, J., D. Boussaoud, N. Boyer-Zeller and **E.M. Rouiller** (1996) Direct visual pathways for reaching movements: an anatomical and physiological study in macaque monkey. *Neuroreport* 7, 267-272. [\[Abstract\]](#)

**54\*** Vischer, M., V. Bajo-Lorenzana, J.S. Zhang, R. Häusler and **E.M. Rouiller** (1995) Activity elicited in the auditory pathway of the rat by electrical stimulation of the cochlea. *ORL* 57, 305-309. [\[Abstract\]](#)

**53\*** Zhang, J.S., A. Haenggeli, A. Tempini, M. Vischer, V. Moret and **E.M. Rouiller** (1996) Electrically induced Fos-like immunoreactivity (FLI) in the auditory pathway of the rats: effects of survival time, duration and intensity of stimulation. *Brain Res. Bull.* 39, 75-82. [\[Abstract\]](#)

**52\*** Clarke, S., F. de Ribaupierre, V.M. Bajo, **E.M. Rouiller** and R. Kraftsik (1995) The auditory pathway in cat corpus callosum. *Exp. Brain Res.* 104, 534-540. [\[Abstract\]](#)

**51\*** Bajo, V.M., **E.M. Rouiller**, E. Welker, S. Clarke, A.E.P. Villa, Y. de Ribaupierre and F. de Ribaupierre (1995) Morphology and spatial distribution of corticothalamic terminals originating from the cat auditory cortex. *Hearing Res.* 83, 161-174. [\[Abstract\]](#)

**50\*** Yu, X.H., V. Moret and **E.M. Rouiller** (1995) Re-examination of the plasticity of the corticothalamic projection after unilateral neonatal lesion of the sensorimotor cortex in the rat; a phaseolus vulgaris-leucoagglutinin tracing study. *J. für Hirnforschung* 36, 123-133. [\[Abstract\]](#)

- 49\*** Rouiller, E.M., A. Babalian, O. Kazennikov, V. Moret, X.H. Yu and M. Wiesendanger (1994) Transcallosal connections of the distal forelimb representations of the primary and supplementary motor cortical areas in macaque monkeys. *Exp. Brain Res.* 102, 227-243. [\[Abstract\]](#)
- 48\*** Zurita, P., A.E.P. Villa, Y. de Ribaupierre, F. de Ribaupierre and **E.M. Rouiller** (1994) Changes of single unit activities in the cat's auditory thalamus and cortex associated to different anesthetic conditions. *Neurosci. Res.* 19, 303-316. [\[Abstract\]](#)
- 47\*** Kazennikov, O., U. Wicki, M. Corboz, B. Hyland, A. Palmeri, **E.M. Rouiller** and M. Wiesendanger (1994) Temporal and spatial structure of a bimanual goal-directed movement sequence in monkeys. *Europ. J. Neurosci.* 6, 203-210. [\[Abstract\]](#)
- 46\*** Rouiller, E.M., F. Liang, A. Babalian, V. Moret and M. Wiesendanger (1994) Cerebello-thalamo-cortical and pallido-thalamo-cortical projections to the primary (M1) and supplementary (SMA) motor cortical areas: a multiple tracing study in macaque monkeys. *J. Comp. Neurol.* 345, 185-213. [\[Abstract\]](#)
- 45\*** Vischer, M., R. Häusler and **E.M. Rouiller** (1994) Distribution of c-fos expression in the auditory pathways of the rat elicited by cochlear electrical stimulation. *Neurosci. Res.* 19, 175-185. [\[Abstract\]](#)
- 44\*** Clarke, S., F. de Ribaupierre, **E.M. Rouiller** and Y. de Ribaupierre (1993) Several neuronal and axonal types form long intrinsic connections in the cat primary auditory cortical field (AI). *Anat. and Embryol.* 188, 117-138. [\[Abstract\]](#)
- 43\*** Babalian, A., F. Liang and **E.M. Rouiller** (1993) Cortical influences on cervical motoneurons in the rat: recordings of synaptic responses from motoneurons and compound action potential from corticospinal axons. *Neurosci. Res.* 16, 301-310. [\[Abstract\]](#)
- 42\*** Bajo, V., M. Merchan, D. Lopez and **E.M. Rouiller** (1993) Neuronal morphology and efferent projections of the dorsal nucleus of the lateral lemniscus of the rat. *J. Comp. Neurol.* 334, 241-262. [\[Abstract\]](#)
- 41\*** Rouiller, E.M., V. Moret and F. Liang (1993) Comparison of the connective properties of the two forelimb areas of the rat sensorimotor cortex: support for the presence of a premotor or supplementary motor cortical area. *Somatosensory and Motor Research* 10, 269-289. [\[Abstract\]](#)
- 40\*** Liang, F., **Rouiller, E.M.** and M. Wiesendanger (1993) Modulation of sustained electromyographic activity by single intracortical microstimuli: comparison of two forelimb motor cortical areas of the rat. *Somatosensory and Motor Research* 10, 51-61. [\[Abstract\]](#)

**39 Rouiller, E.M.** (1992) Organisation fonctionnelle des voies auditives. Dans: Le système auditif central, anatomie et physiologie. Ed. R. Romand, Série audition, INSERM/SFA, Paris, pp. 1-33. [\[Abstract\]](#)

**38\* Rouiller, E.M.,** X.S.T. Wan, V. Moret and F. Liang (1992) Mapping of c-fos expression elicited by pure tones stimulation in the auditory pathways of the rat, with emphasis on the cochlear nucleus. *Neuroscience Letters* 144, 19-24. [\[Abstract\]](#)

**37\*** Wan, X.S.T., F. Liang, V. Moret, M. Wiesendanger and **E.M. Rouiller** (1992) Mapping of the motor pathways in rats: c-fos induction by intracortical microstimulation of the motor cortex correlated with efferent connectivity of the site of cortical stimulation. *Neuroscience* 49, 749-761. [\[Abstract\]](#)

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