

Erasmus University Rotterdam, the Netherlands
CSC PhD 2015 Project Description

School/Department:	Department of Neuroscience, Erasmus MC, University Medical Center Rotterdam, the Netherlands.
Project Title:	Molecular mechanisms underlying neurodevelopmental disorders.
Abstract:	Our lab makes use of multi-disciplinary approach to understand the molecular mechanisms underlying learning and memory formation. We make use of molecular techniques (including the generation of new mouse models), mouse behavioral paradigms, and electrophysiology (field and whole-cell recording) to study mouse models. We focus in particular on mouse models of neurodevelopmental disorders (mental retardation disorders and autism). In parallel, we do translational research, for which we develop therapies and perform clinical trials.
Requirements of candidate:	<p>Master degree: Yes, Biology, Medicine or Physics</p> <p>Background: Preferably Neuroscience, Molecular Biology or Physiology</p> <p>IELTS Grade: 6.5 (minimal 6.0 per component)</p>
Supervisor information:	<p>Prof. dr. Ype Elgersma y.elgersma@erasmusmc.nl http://beta.neuro.nl/research/elgersma</p> <p>Publications Prof. dr. Ype Elgersma</p> <p>Gao, Z., van Woerden, G.M., Elgersma, Y., De Zeeuw, C.I., and Hoebeek, F.E. (2014). Distinct roles of α- and βCaMKII in controlling long-term potentiation of GABAA-receptor mediated transmission in murine Purkinje cells. Front Cell Neurosci 8, 16. [IF: 4.2]</p> <p>Overwater, I.E., Rietman, A.B., Elgersma, Y. and de Wit, M.-C.Y. (2014). Treatment of intractable epilepsy in tuberous sclerosis complex with everolimus is not yet evidence based. Ann Neurol. 75,163-164. [IF: 11.9]</p> <p>Tonazzini, I., Cecchini, A., Elgersma, Y., and Cecchini, M. (2014). Interaction of SH-SY5Y Cells with Nanogratings During Neuronal Differentiation: Comparison with Primary Neurons. Adv Healthc Mater 3, 581-587. [IF: 4.9]</p>

	<p>Groenewoud, M.J., Goorden, S.M.I., Kassies, J., Pellis-van Berkel, W., Lamb, R.F., Elgersma, Y., and Zwartkruis, F.J.T. (2013). Mammalian target of rapamycin complex I (mTORC1) activity in ras homologue enriched in brain (Rheb)-deficient mouse embryonic fibroblasts. PLoS ONE 8, e81649. [IF: 3.7]</p> <p>Van Der Vaart, T., Plasschaert, E., Rietman, A.B., Renard, M., Oostenbrink, R., Vogels, A., de Wit, M.-C.Y., Descheemaeker, M.-J., Vergouwe, Y., Catsman-Berrevoets, C.E., et al. (2013). Simvastatin for cognitive deficits and behavioural problems in patients with neurofibromatosis type 1 (NF1-SIMCODA): a randomised, placebo-controlled trial. Lancet Neurol 12, 1076–1083. [IF: 23.9]</p> <p>Abs, E., Goorden, S.M.I., Schreiber, J., Overwater, I.E., Hoogeveen-Westerveld, M., Bruinsma, C.F., Aganović, E., Borgesius, N.Z., Nellist, M., and Elgersma, Y. (2013). TORC1-dependent epilepsy caused by acute biallelic Tsc1 deletion in adult mice. Ann Neurol 74, 569–579. [IF: 11.2]</p> <p>Galliano, E., Potters, J.-W., Elgersma, Y., Wisden, W., Kushner, S.A., De Zeeuw, C.I., and Hoebeek, F.E. (2013). Synaptic transmission and plasticity at inputs to murine cerebellar purkinje cells are largely dispensable for standard nonmotor tasks. J Neurosci 33, 12599–12618. [IF: 6.9]</p> <p>Melser, S., Chatelain, E.H., Lavie, J., Mahfouf, W., Jose, C., Obre, E., Goorden, S., Priault, M., Elgersma, Y., Rezvani, H.R., et al. (2013). Rheb regulates mitophagy induced by mitochondrial energetic status. Cell Metabolism 17, 719–730. [IF: 14.6]</p> <p>Waggener, C.T., Dupree, J.L., Elgersma, Y., and Fuss, B. (2013). CaMKIIβ Regulates Oligodendrocyte Maturation and CNS Myelination. J Neurosci 33, 10453–10458. [IF: 6.9]</p> <p>Overwater, I.E., Rietman, A.B., Elgerma, Y., and de Wit, M.-C.Y. (2013a). Treatment of intractable epilepsy in TSC with everolimus not yet evidence-based. Ann Neurol. [IF: 11.2]</p> <p>Overwater, I.E., Van Der Vaart, T., de Wit, M.-C.Y., Oostenbrink, R., and Elgersma, Y. (2013b).</p>
--	--

	<p>Behandelingen voor genetische neurocognitieve aandoeningen. Neuropraxis 5, 132–138. [IF: unknown]</p> <p>Acosta, M.T., Bearden, C.E., Castellanos, X.F., Cutting, L., Elgersma, Y., Gioia, G., Gutmann, D.H., Lee, Y.-S., Legius, E., Muenke, M., et al. (2012). The Learning Disabilities Network (LeaDNet): using neurofibromatosis type 1 (NF1) as a paradigm for translational research. Am J Med Genet 158A, 2225–2232. [IF: 2.3]</p> <p>Castrén, E., Elgersma, Y., Maffei, L., and Hagerman, R. (2012). Treatment of neurodevelopmental disorders in adulthood. J Neurosci 32, 14074–14079. [IF: 6.9]</p> <p>Cho, J., Bhatt, R., Elgersma, Y., and Silva, A.J. (2012). α-Calcium Calmodulin Kinase II Modulates the Temporal Structure of Hippocampal Bursting Patterns. PLoS ONE 7, e31649. [IF: 3.7]</p> <p>Steinkellner, T., Yang, J.-W., Montgomery, T.R., Chen, W.-Q., Winkler, M.-T., Sucic, S., Lubec, G., Freissmuth, M., Elgersma, Y., Sitte, H.H., et al. (2012). Ca(2+)/calmodulin-dependent protein kinase IIα (αCaMKII) controls the activity of the dopamine transporter: implications for Angelman syndrome. J Biol Chem 287, 29627–29635. [IF: 4.7]</p> <p>van Beveren, N.J.M., Buitendijk, G.H.S., Swagemakers, S., Krab, L.C., Röder, C., de Haan, L., van der Spek, P., and Elgersma, Y. (2012a). Marked reduction of AKT1 expression and deregulation of AKT1-associated pathways in peripheral blood mononuclear cells of schizophrenia patients. PLoS ONE 7, e32618. [IF: 3.7]</p> <p>van Beveren, N.J.M., Krab, L.C., Swagemakers, S., Buitendijk, G., Boot, E., van der Spek, P., Elgersma, Y., and van Amelsvoort, T.A.M.J. (2012b). Functional Gene-Expression Analysis Shows Involvement of Schizophrenia-Relevant Pathways in Patients with 22q11 Deletion Syndrome. PLoS ONE 7, e33473. [IF: 3.7]</p> <p>Loos, M., Staal, J., Pattij, T.; Neuro-BSIK Mouse Phenomics Consortium, Smit, A.B., Spijker, S. et al. (2012). Independent genetic loci for sensorimotor gating and attentional performance in BXD recombinant inbred strains. Genes Brain Behav. 11, 147-156 [IF:</p>
--	---

	<p>3.5] Jansen, R., Timmerman, J., Loos, M., Spijker, S., van Ooyen, A., Brussaard, A.B., Mansvelder, H.D.; Neuro-Bsik Mouse Phenomics Consortium, Smit, A.B., de Gunst, M., Linkenkaer-Hansen, K. et al. (2011). Novel candidate genes associated with hippocampal oscillations. <i>PLoS One</i> 6:e26586.</p> <p>[IF: 4.4] Borgesius, N.Z., de Waard, M.C., van der Pluijm, I., Omrani, A., Zondag, G.C.M., van der Horst, G.T.J., Melton, D.W., Hoeijmakers, J.H.J., Jaarsma, D., and Elgersma, Y. (2011a). Accelerated age-related cognitive decline and neurodegeneration, caused by deficient DNA repair. <i>J Neurosci</i> 31, 12543–12553. [IF: 6.9]</p> <p>Borgesius, N.Z., van Woerden, G.M., Buitendijk, G.H.S., Keijzer, N., Jaarsma, D., Hoogenraad, C.C., and Elgersma, Y. (2011b). βCaMKII plays a nonenzymatic role in hippocampal synaptic plasticity and learning by targeting αCaMKII to synapses. <i>J Neurosci</i> 31, 10141–10148. [IF: 6.9]</p> <p>Goorden, S.M.I., and Elgersma, Y. (2011). Rheb: enrichment beyond the brain. <i>Cell Cycle</i> 10, 2412–2413. [IF: 5.3]</p> <p>Goorden, S.M.I., Hoogeveen-Westerveld, M., Cheng, C., van Woerden, G.M., Mozaffari, M., Post, L., Duckers, H.J., Nellist, M., and Elgersma, Y. (2011). Rheb is essential for murine development. <i>Mol Cell Biol</i> 31, 1672–1678. [IF: 5.4]</p> <p>Krab, L.C., de Goede-Bolder, A., Aarsen, F.K., Moll, H.A., De Zeeuw, C.I., Elgersma, Y., and van der Geest, J.N. (2011). Motor learning in children with neurofibromatosis type I. <i>Cerebellum</i> 10, 14–21. [IF: 2.6]</p> <p>Papachristos, E.B., Jacobs, E.H., and Elgersma, Y. (2011). Interval timing is intact in arrhythmic Cry1/Cry2-deficient mice. <i>J. Biol. Rhythms</i> 26, 305–313. [IF: 3.2]</p> <p>Malkki, H.A., Donga, L.A., de Groot, S.E.; NeuroBSIK Mouse Phenomics Consortium, Battaglia, F.P., Pennartz, C.M. et al (2011). Towards mouse models of perseveration: a heritable component in extinction of operant behavior in fourteen standard and recombinant inbred mouse lines.</p>
--	--

	<p>Neurobiol Learn Mem. 96, 280-728. [IF: 3.7] van der Vaart, T., van Woerden, G.M., Elgersma, Y., De Zeeuw, C.I., and Schonewille, M. (2011). Motor deficits in neurofibromatosis type 1 mice: the role of the cerebellum. Genes Brain Behav 10, 404–409. [IF: 3.6] Malkki, H.A., Donga, L.A., de Groot, S.E., Battaglia, F.P.; NeuroBSIK Mouse Phenomics Consortium, Pennartz, C.M. et al. (2010) Appetitive operant conditioning in mice: heritability and dissociability of training stages. Front Behav Neurosci. 4, 171. IF: 4.8] Belmeguenai, A., Hosy, E., Bengtsson, F., Pedroarena, C.M., Piochon, C., Teuling, E., He, Q., Ohtsuki, G., De Jeu, M.T.G., Elgersma, Y., et al. (2010). Intrinsic plasticity complements longterm potentiation in parallel fiber input gain control in cerebellar Purkinje cells. J Neurosci 30, 13630–13643. [IF: 6.9] de Waard, M.C., van der Pluijm, I., Zuiderveen Borgesius, N., Comley, L.H., Haasdijk, E.D., Rijksen, Y., Ridwan, Y., Zondag, G., Hoeijmakers, J.H.J., Elgersma, Y., et al. (2010). Age-related motor neuron degeneration in DNA repair-deficient Ercc1 mice. Acta Neuropathol 120, 461–475. [IF: 9.7] Schonewille, M., Belmeguenai, A., Koekkoek, S.K., Houtman, S.H., Boele, H.J., van Beugen, B.J., Gao, Z., Badura, A., Ohtsuki, G., Amerika, W.E., et al. (2010). Purkinje cell-specific knockout of the protein phosphatase PP2B impairs potentiation and cerebellar motor learning. Neuron 67, 618–628. [IF: 15.8] Van Woerden, G.M., Hoebeek, F.E., Gao, Z., Nagaraja, R.Y., Hoogenraad, C.C, Kushner, S.A., Hansel, C., De Zeeuw, C.I., Elgersma, Y. (2009) βCaMKII controls the direction of plasticity at parallel fiber – Purkinje cell synapses, Nat Neurosci, 12, 823-825. [IF: 15.7] Loos, M., van der Sluis, S., Bochdanovits, Z., van Zutphen, I.J., Pattij, T., Stiedl, O., Neuro-Bsik Mouse Phenomics consortium, Smit, A.B., and Spijker, S. et al. (2009). Activity and impulsive action are controlled by different genetic and environmental factors.</p>
--	---

	<p>Genes Brain Behav 8, 817-828. [IF: 3.6]</p> <p>Krab, L.C., Oostenbrink, R., De Goede-Bolder, A., Aarsen, F.K., Elgersma, Y. and Moll, H.A. (2009) Health Related Quality of Life in children with Neurofibromatosis Type 1: Contribution of demographic factors, disease related factors, and behavior. J. Pediatrics: 154, 420-425 [IF: 4.0]</p> <p>Denayer, E., Ahmed, T., Brems, H., Van Woerden, G., Borgesius, N.Z., Callaerts-Vegh, Z., Yoshimura, A., Hartmann, D., Elgersma, Y., D'Hooge, R. and Legius, E. (2008). Spred1 is required for synaptic plasticity and hippocampus-dependent learning. J. Neurosci, 28, 14443-14449. [IF: 7.5]</p> <p>Cui, Y., Rui Costa, R.M., Murphy, G., Elgersma, Y., Zhu, Y., Gutmann, D.H., Parada, L.M., Mody, I. and Silva, A.J. (2008) Neurofibromin Regulation of ERK Signaling Modulates GABA Release and Learning. Cell 135, 549-560 [IF: 30]</p> <p>Krab, L.C., Goorden, S.M. and Elgersma, Y. (2008) Oncogenes on my mind: ERK and MTOR signaling in cognitive diseases. Trends in Genetics 24, 498-510 [IF: 12.0]</p> <p>Krab, L.C., De Goede-Bolder, A., Aarsen, F.K., Pluijm, S.M., Bouman, M.J., van der Geest, J.N., Lequin, M., Catsman, C.E., Arts, W.F., Kushner, S.A., Silva, A.J., de Zeeuw, C.I., Moll, H.A. and Elgersma, Y. (2008) Effect of simvastatin on cognitive functioning in children with neurofibromatosis type 1: a randomized controlled trial. JAMA 300, 287-294. [IF: 24]</p> <p>Heimel, J.A., Hermans, J.M., Sommeijer, J.P., Neuro-Bsik Mouse Phenomics consortium, and Levelt, C.N. (2008). Genetic control of experience-dependent plasticity in the visual cortex. Genes Brain Behav 7, 915-923. [IF: 3.6]</p> <p>Krab, LC., Aarsen, FK., De Goede-Bolder, A., Coriene E. Catsman-Berrevoets, CE., Arts, WF., Moll, HA., Elgersma, Y (2008) Impact of Neurofibromatosis Type 1 on School Performance J. Child Neurol. 23,1002-1010 [IF: 1.4]</p> <p>Olijslagers, J.E., de Kloet, E.R., Elgersma, Y., van Woerden, G.M.,</p>
--	---

	<p>Joëls, M., Karst, H. (2008) Rapid changes in hippocampal CA1 pyramidal cell function via pre- as well as postsynaptic membrane mineralocorticoid receptors. <i>Eur J Neurosci.</i> 27, 2542-2550. [IF: 3.9]</p> <p>Van Engelen, S.J., Krab, L.C., Moll, H.A., de Goede-Bolder, A., Pluijm, S.M., Catsman-Berrevoets, C.E., Elgersma, Y., and Lequin, M.H. (2008). Quantitative differentiation between healthy and disordered brain matter in patients with neurofibromatosis type I using diffusion tensor imaging. <i>AJNR Am J Neuroradiol</i> 29, 816-822. [IF: 2.3]</p> <p>Park, C.S., Elgersma, Y., Grant, S.G., and Morrison, J.H. (2008). Alpha-Isoform of calciumcalmodulin-dependent protein kinase II and postsynaptic density protein 95 differentially regulate synaptic expression of NR2A- and NR2B-containing N-methyl-d-aspartate receptors in hippocampus. <i>Neuroscience</i> 151, 43-55 [IF: 3.4]</p> <p>Goorden, S.M., van Woerden, G.M., Van der Weerd, L., Cheadle, J.P., and Elgersma, Y. (2007). Cognitive deficits in Tsc1+/- mice in the absence of cerebral lesions and seizures. <i>Ann Neurol</i> 62, 648-655. [IF: 8.1]</p> <p>Hojjati, M.R., van Woerden, G.M., Tyler, W.J., Giese, K.P., Silva, A.J., Pozzo-Miller, L., and Elgersma, Y. (2007). Kinase activity is not required for alphaCaMKII-dependent presynaptic plasticity at CA3-CA1 synapses. <i>Nat Neurosci</i> 10, 1125-1127. [IF: 15.5]</p> <p>Elgersma, Y. (2007) Genetic engineering cure mice of neurological deficits: prospects for treating Angelman syndrome (2007), <i>Pharmacogenomics</i>, 8, 539-541 [IF: 3.6]</p> <p>Van Woerden, G.M., Harris, K.D., Hojjati, M., Richard, M.G., Shenfeng, Q., de Avila Freire, R., Jiang, Y., Elgersma, Y. (corr. author), and Weeber, E.J. (2007). Rescue of neurological deficits in a mouse model for Angelman syndrome by reduction of αCaMKII inhibitory phosphorylation. <i>Nature Neurosci</i> 10, 280-282. [IF: 15.5]</p> <p>Hansel, C., de Jeu, M., Belmeguenai, A., Houtman, S.H., Buitendijk, G.H., Andreev, D., De Zeeuw, C. I., and Elgersma, Y. (2006). alphaCaMKII Is essential for Cerebellar</p>
--	--

	<p>LTD and motor learning. Neuron 51, 835-843 [IF: 14.3]. Elgersma, Y.*, Kushner, S.A., Murphy, G.G., Jaarsma, D., van Woerden, G.M., Hojjati, M.R., Cui, Y., LeBoutillier, J.C., Marrone, D.F., Choi, E.S., et al. (2005). Modulation of presynaptic plasticity and learning by the H-ras/extracellular signal-regulated kinase/synapsin I signaling pathway. J Neurosci 25, 9721-9734. [IF: 7.5] Zhang, L., Kirschstein, T., Sommersberg, B., Merkens, M., Manahan-Vaughan, D., Elgersma, Y., and Beck, H. (2005). Hippocampal synaptic metaplasticity requires inhibitory autophosphorylation of Ca²⁺/calmodulin-dependent kinase II. J Neurosci 25, 7697-7707. [IF: 7.5] Burguiere, E., Arleo, A., Hojjati, M., Elgersma, Y., De Zeeuw, C.I., Berthoz, A., and Rondi-Reig, L. (2005). Spatial navigation impairment in mice lacking cerebellar LTD: a motor adaptation deficit? Nat Neurosci. 8, 1292-1294. [IF: 15.4] Elgersma, Y., Sweatt J.D., Giese K.P. (2004) Mouse genetic approaches to investigating calcium/calmodulin-dependent protein kinase II function in plasticity and cognition. J Neurosci. 2004, 24, 8410-8415 [IF: 7.5] Koekkoek S.K., Hulscher H.C., Dortland, B.R., Hensbroek, R.A., Elgersma, Y., Ruigrok, T.J., De Zeeuw C.I. (2003) Cerebellar LTD and learning-dependent timing of conditioned eyelid responses. Science 301, 1736-1739 [IF: 29.2] Weeber, E.J., Jiang Y.H.*, Elgersma Y.*, Varga, A.W., Carrasquillo, Y., Brown, S.H., Christian, J.M., Mirnikjoo, B., Silva, A.J., Beaudet, A.L. and Sweatt, J.D. (2003) Derangements of hippocampal CaMKII in a mouse model for Angelman mental retardation syndrome J. Neurosci. 23, 2634-2644 [IF: 7.5] Elgersma, Y., Fedorov, N.B., Ikonen, S., Choi, E.S., Elgersma, M., Giese, K.P. and Silva A.J. (2002). Inhibitory autophosphorylation of CaMKII controls PSD association, plasticity, and learning. Neuron 36, 493-505. [IF: 14.3] Kistler, W.M., De Jeu, M.T., Elgersma, Y., Van Der Giessen, R.S.,</p>
--	--

	<p>Hensbroek, R., Luo, C., Koekkoek, S.K., Hoogenraad, C.C., Hamers, F.P., Gueldenagel, M., Sohl, G., Willecke, K. and De Zeeuw, C.I. (2002) Analysis of Cx36 knockout does not support tenet that olivary gap junctions are required for complex spike synchronization and normal motor performance. <i>Ann N Y Acad Sci.</i> 978, 391-404. [IF: 1.6]</p> <p>Silva A.J., Elgersma, Y. and Costa, R.M. (2001) From genes to therapies: the role of animal models. <i>Clin. Neur. Res.</i>, 1, 187-193. [IF: 1.3]</p> <p>Distel, B., Braakman, I., Elgersma, Y. and Tabak, H.F. (2000). Transactions at the peroxisomal membrane. <i>Subcell Biochem.</i> 34, 303-322. [IF unknown]</p> <p>Silva, A.J., Elgersma, Y. and Costa, R. (2000) Molecular and cellular mechanisms of cognitive function: Implications for psychiatric disorders. <i>Biol. Psych.</i> 47, 200-209. [IF: 9.3]</p> <p>Elgersma, Y., and Silva. A.J. (1999) Molecular mechanisms of synaptic plasticity and memory. <i>Curr Opin Neurobiol.</i> 9, 209-213. [IF: 8.5]</p> <p>Elgersma, Y., Elgersma-Hooisma, M., Wenzel, T., McCaffery, J.M., Farquhar M.G. and Subramani S. (1998) A mobile PTS2-receptor for peroxisomal protein import in <i>Pichia pastoris</i>. <i>J. Cell Biol.</i> 140, 807-820. [IF: 14.0]</p> <p>Elgersma, Y., Kwast, L., Van den Berg, M., Snyder, W.B., Distel, B., Subramani, S. and Tabak, H.F. (1997) Overexpression of Pex15p, a phosphorylated peroxisomal integral membrane protein required for peroxisome assembly in <i>S.cerevisiae</i>, causes proliferation of the endoplasmic reticulum membrane. <i>EMBO J.</i> 16, 7326-7341. [IF: 14.0]</p> <p>Verleur, N., Elgersma, Y., Van Roermund, C., Tabak, H.F. and Wanders, R.J.A. (1997) Cytosolic aspartate aminotransferase encoded by the AAT2 gene is targeted to the peroxisomes in oleategrown <i>S. cerevisiae</i>. <i>Eur. J. Biochem.</i> 247, 972-980. [IF: 2.9]</p> <p>Elgersma, Y., Kwast, L., Klein, A., Voorn-Brouwer, T., Van den Berg, M., Metzger, B., America, T., Tabak H.F. and Distel, B. (1996) The SH3 domain of the peroxisomal membrane protein Pex13p, functions as a docking site for Pex5p, a mobile receptor for</p>
--	---

	<p>peroxisomal proteins. <i>J. Cell Biol.</i> 135, 97-109. [IF: 14.0]</p> <p>Elgersma, Y., Vos, A., Van den Berg, M., Van Roermund, C.W.T., Van der Sluijs, P., Distel, B. and Tabak, H.F. (1996) Analysis of the carboxy-terminal peroxisomal targeting signal (PTS1) in an homologous context in <i>Saccharomyces cerevisiae</i>. <i>J. Biol. Chem.</i> 271, 26375-26382. [IF: 7.4]</p> <p>Elgersma, Y. and Tabak, H.F. (1996) Proteins involved in peroxisome biogenesis and functioning. <i>Biochim. Biophys. Acta</i> 1286, 269-283. [IF: 5.7]</p> <p>Tabak, H. F., Elgersma, Y., Hettema, E., Franse, M.M., Voorn-Brouwer, T. and Distel, B. (1995) Transport of proteins and metabolites across the impermeable membrane of peroxisomes. <i>Cold Spring Harb. Symp. Quant. Biol.</i> 60, 649-655. [IF: 2.3]</p> <p>Elgersma, Y.*, Van Roermund, C.W.T.*, Singh, N., Wanders, R.J.A. and Tabak H.F. (1995) The membrane of peroxisomes in <i>Saccharomyces cerevisiae</i> is impermeable to NAD(H) and acetyl-CoA under <i>in vivo</i> conditions. <i>EMBO J.</i> 14, 3480-3486. [IF: 14.0]</p> <p>Elgersma, Y., Van Roermund, C.W.T., Wanders, R.J.A. and Tabak H.F. (1995) Peroxisomal and mitochondrial carnitine acetyltransferases of <i>Saccharomyces cerevisiae</i> are encoded by a single gene. <i>EMBO J.</i> 14, 3472-3479. [IF: 14.0]</p> <p>Elgersma, Y.*, Van der Leij I.*, Franse, M.M.*, Distel, B. and Tabak, H.F. (1993) PAS10 is a tetratricopeptide-repeat protein that is essential for the import of most matrix proteins into peroxisomes of <i>Saccharomyces cerevisiae</i>. <i>Proc. Natl. Acad. Sci. USA</i> 90, 11782-11786. [IF: 10.8]</p> <p>Elgersma, Y., Van den Berg, M., Tabak, H.F. and Distel, B. (1993) An efficient positive selection procedure for the isolation of peroxisomal import and peroxisome assembly mutants of <i>Saccharomyces cerevisiae</i>. <i>Genetics</i> 135, 731-740. [IF: 4.3]</p> <p>Vink, C., Van Gent, D.C., Elgersma, Y. and Plasterk, R.H.A. (1991) Human immunodeficiency virus integrase protein requires a subterminal position of its viral DNA recognition sequence for efficient</p>
--	--

	<p>cleavage. J. Virology 65, 4636-4644. [IF: 5.8] Van Gent, D.C., Elgersma, Y., Bolk, M.W.J., Vink, C. and Plasterk R.H.A. (1991) DNA binding properties of the integrase proteins of human immunodeficiency viruses type 1 and 2. Nucleic Acids Res. 19, 3821-3827. [IF: 4.2] Vink, C., Groenink, M., Elgersma, Y., Fouchier, R.A.M., Tersmette, M. and Plasterk, R.H.A. (1990) Analysis of the junctions between human immunodeficiency virus type 1 proviral DNA and human DNA. J. Virology 64, 5626-5627. [IF: 5.8]</p>
--	--