

96. Dueking, T.; Spieth, L.; Berghoff, S.A.; Piepkorn, L.; Schmidke, A.M.; Mitkovski, M.; Kannaiyan, N.; Hosang, L.; Scholz, P.; Shaib, A.H.; Schneider, L.V.; Hesse, D.; Ruhwedel, T.; Sun, T.; Linhoff, L.; Trevisiol, A.; Köhler, S.; Marti Pastor, A.; Misgeld, T.; Sereda, M.; Hassouna, I.; Rossner, M.J.; Odoardi, F.; Ischebeck, T.; de Hoz, L.; Hirrlinger, J.; **Jahn, O.**; Saher, G. Ketogenic diet uncovers differential metabolic plasticity of brain cells. *Science Advances* 2022; **8**:eabo7639.
95. Gargareta, V.-I.; Reuschenbach, J.; Siems, S.B.; Sun, T.; Piepkorn, L.; Mangana, C.; Späte, E.; Goebbels, S.; Huitinga, I.; Möbius, W.; Nave, K.-A.; ***Jahn, O.**; Werner, H.B. Conservation and divergence of myelin proteome and oligodendrocyte transcriptome profiles between humans and mice. *eLife* 2022; **11**:e77019 (*co-corresponding author).
94. Buscham, T.J.; Eichel-Vogel, M.A.; Steyer, A.M.; **Jahn, O.**; Strenzke, N.; Dardawal, R.; Memhave, T.R.; Siems, S.B.; Müller, C.; Meschkat, M.; Sun, T.; Ruhwedel, T.; Möbius, W.; Krämer-Albers, E.-M.; Boretius, S.; Nave, K.-A.; Werner, H.B. Progressive axonopathy when oligodendrocytes lack the myelin protein CMTM5. *eLife* 2022; **11**:e75523.
93. Meschkat, M.; Steyer, A.M.; Weil, M.T.; Kusch, K.; **Jahn, O.**; Piepkorn, L.; Agüi Gonzalez, P.; Ngoc Phan, N.T.; Ruhwedel, T.; Sadowski, B.; Rizzoli, S.O.; Werner, H.B.; Ehrenreich, H.; Nave, K.-A.; Möbius, W. White matter integrity requires continuous myelin synthesis at the inner tongue. *Nature Communications* 2022; **13**:1163.
92. Klafki, H.W.; Wirths, O.; Mollenhauer, B.; Liepold, T.; Rieper, P.; Esselmann, H.; Vogelgsang, J.; Wiltfang, J.; **Jahn, O.** Detection and quantification of A β -3-40 (APP669-711) in cerebrospinal fluid. *Journal of Neurochemistry* 2022; **160**:578-589.
91. Siems, S.B.; ***Jahn, O.**; Hoodless, L.J.; Jung, R.B.; Hesse, D.; Möbius, W.; Czopka, T.; Werner, H.B. Proteome profile of myelin in the zebrafish brain. *Frontiers in Cell and Developmental Biology* 2021; **9**:640169 (*co-first author).
90. Ambrozkiwicz, M.C.; Borisova, E.; Schwark, M.; Ripamonti, S.; Schaub, T.; Smorodchenko, A.; Weber, A.I.; Rhee, H.J.; Altas, B.; Yilmaz, R.; Mueller, S.; Piepkorn, L.; Horan, S.T.; Straussberg, R.; Zaqout, S.; **Jahn, O.**; Dere, E.; Rosário, M.; Boehm-Sturm, P.; Borck, G.; Willig, K.I.; Rhee, JS.; Tarabykin, V.; Kawabe, H. The murine ortholog of Kaufman oculocerebrofacial syndrome protein Ube3b regulates synapse number by ubiquitinating Ppp3cc. *Molecular Psychiatry* 2021; **26**:1980-1995.
89. Klafki, H.W.; Rieper, P.; Matzen, A.; Zampar, S.; Wirths, O.; Vogelgsang, J.; Osterloh, D.; Rohdenburg, L.; Oberstein, T.J.; **Jahn, O.**; Beyer, I.; Lachmann, I.; Knölker, H.-J.; Wiltfang, J. Development and technical validation of an immunoassay for the detection of APP₆₆₉₋₇₁₁ (A β -3-40) in biological samples. *International Journal of Molecular Sciences* 2020; **21**:6564.

88. **Jahn, O.**; Siems, S.B.; Kusch, K.; Hesse, D.; Jung, R.B.; Liepold, T.; Uecker, M.; Sun, T.; Werner, H.B. The CNS myelin proteome: Deep profile and persistence after post-mortem delay. *Frontiers in Cellular Neuroscience* 2020; **14**:239.
87. Dihazi, G.H.; Eltoweissy, M.; **Jahn, O.**; Tampe, B.; Zeisberg, M.; Wülfrath, H.S.; Müller, G.A.; Dihazi, H. The secretome analysis of activated human renal fibroblasts revealed beneficial effect of the modulation of the secreted peptidyl-prolyl cis-trans isomerase A in kidney fibrosis. *Cells* 2020; **9**:1724.
86. Ripamonti, S.; Shomroni, O.; Rhee, J.-S.; Chowdhury, K.; **Jahn, O.**; Hellmann, K.P.; Bonn, S.; Brose, N.; Tirard, M. SUMOylation controls the neurodevelopmental function of the transcription factor Zbtb20. *Journal of Neurochemistry* 2020; **154**:647-661.
85. Siems, S.B.; ***Jahn, O.**; Eichel, M.A.; Kannaiyan, N.; Wu, L.M.N.; Sherman, D.L.; Kusch, K.; Hesse, D.; Jung, R.B.; Fledrich, R.; Sereda, M.W.; Rossner, M.J.; Brophy, P.J.; Werner, H.B. Proteome profile of peripheral myelin in healthy mice and in a neuropathy model. *eLife* 2020; **9**:e51406 (*co-first author).
84. Koziolok, M.; Mueller, G.A.; Dihazi, G.H.; Jung, K.; Altubar, C.; Wallbach, M.; Markovic, I.; Raddatz, D.; **Jahn, O.**; Karaköse, H.; Lenz, C.; Urlaub, H.; Dihazi, A.; El Meziane, A.; Dihazi, H. Urine E-cadherin: a marker for early detection of kidney injury in diabetic patients. *Journal of Clinical Medicine* 2020; **9**:639.
83. Piotrowski, C.; Moretti, R.; Ihling, C.H.; Haedicke, A.; Liepold, T.; Lipstein, N.; Meiler, J.; ***Jahn, O.**; Sinz, A. Delineating the molecular basis of the Calmodulin/bMunc13-2 interaction by cross-linking/mass spectrometry – Evidence for a novel CaM binding motif in bMunc13-2. *Cells* 2020; **9**:136 (*co-corresponding author).
82. Akula, A.K.; Zhang, X.; Viotti, J.S.; Nestvogel, D.; Rhee, J.-S.; Ebrecht, R.; Reim, K.; Wouters, F.; Liepold, T.; **Jahn, O.**; Bogeski, I.; Dresbach, T. The Calmodulin binding region of the synaptic vesicle protein Mover is required for homomeric interaction and presynaptic targeting. *Frontiers in Molecular Neuroscience* 2019; **12**:249.
81. Szegő, É.M.; Dominguez-Mejide, A.; Gerhardt, E.; König, A.; Koss, D.J.; Li, W.; Pinho, R.; Fahlbusch, C.; Johnson, M.; Santos, P.; Villar-Piqué, A.; Thom, T.; Rizzoli, S.; Schmitz, M.; Li, J.; Zerr, I.; Attems, J.; **Jahn, O.**; Outeiro, T.F. Cytosolic trapping of a mitochondrial heat shock protein is an early pathological event in synucleinopathies. *Cell Reports* 2019; **28**:65-77.
80. Joseph, S.; Vingill, S.; **Jahn, O.**; Fledrich, R.; Werner, H.B.; Katona, I.; Möbius, W.; Mitkovski, M.; Huang, Y.; Weis, J.; Sereda, M.W.; Schulz, J.B.; Nave, K.-A.; Stegmüller, J. Myelinating glia-specific deletion of Fbxo7 in mice triggers axonal degeneration in the central nervous system together with peripheral neuropathy. *Journal of Neuroscience* 2019; **39**:5606-5626.

79. López-Murcia, F.J.; Reim, K.; **Jahn, O.**; Taschenberger, H.; Brose, N. Acute Complexin knockout abates spontaneous and evoked transmitter release. *Cell Reports* 2019; **26**:2521-2530.
78. Scholz, N.; Ehmann, N.; Sachidanandan, D.; Imig, C.; Cooper, B.H.; **Jahn, O.**; Reim, K.; Brose, N.; Meyer, J.; Lamberty, M.; Altrichter, S.; Bormann, A.; Hallermann, S.; Pauli, M.; Heckmann, M.; Stigloher, C.; Langenhan, T.; Kittel, R.J. Complexin cooperates with Bruchpilot to tether synaptic vesicles to the active zone cytomatrix. *Journal of Cell Biology* 2019; **218**:1011-1026.
77. Erwig, M.S.; Patzig, J.; Steyer, A.M.; Dibaj, P.; Heilmann, M.; Heilmann, I.; Jung, R.B.; Kusch, K.; Möbius, W.; **Jahn, O.**; Nave, K.-A.; Werner, H.B. Anillin facilitates septin assembly to prevent pathological outfoldings of central nervous system myelin. *eLife* 2019; **8**:e43888.
76. Hornung, K.; Zampar, S.; Engel, N.; Klafki, H.; Liepold, T.; Bayer, T.A.; Wiltfang, J.; **Jahn, O.**; Wirths, O. N-terminal truncated A β 4-42 is a substrate for neprilysin degradation in vitro and in vivo. *Journal of Alzheimer's Disease* 2019; **67**:849-858.
75. Sondermann, J.R.; Barry, A.M.; **Jahn, O.**; Michel, N.; Abdelaziz, R.; Kügler, S.; Gomez-Varela, D.; Schmidt, M. Vti1b modulates TRPV1 sensitization during inflammatory pain. *Pain* 2019; **160**:508-527.
74. Ambrozkiwicz, M.C.; Schwark, M.; Kishimoto-Suga, M.; Borisova, E.; Hori, K.; Salazar-Lázaro, A.; Rusanova, A.; Altas, B.; Piepkorn, L.; Bessa, P.; Schaub, T.; Zhang, X.; Rabe, T.; Ripamonti, S.; Rosário, M.; Akiyama, H.; **Jahn, O.**; Kobayashi, T.; Hoshino, M.; Tarabykin, V.; Kawabe, H. Polarity acquisition in cortical neurons is driven by synergistic action of Sox9-regulated Wwp1 and Wwp2 E3 ubiquitin ligases and intronic miR-140. *Neuron* 2018; **100**:1097-1115.
73. Stankova, T.; Piepkorn, L.; Bayer, T.A.; **Jahn, O.**; Tirard, M. SUMO1-conjugation is altered during normal aging but not by increased amyloid burden. *Aging Cell* 2018; **17**:e12760.
72. Candiello, E.; Mishra, R.; Schmidt, B.; **Jahn, O.**; Schu, P. Differential regulation of synaptic AP-2/clathrin vesicle uncoating in synaptic plasticity. *Scientific Reports* 2017; **7**:15781.
71. Lipstein, N.; Verhoeven-Duif, N.M.; Michelassi, F.E.; Calloway, N.; van Hasselt, P.M.; Pienkowska, K.; van Haften, G.; van Haelst, M.M.; van Empelen, R.; Cuppen, I.; van Teeseling, H.C.; Evelein, A.M.; Vorstman, J.A.; Thoms, S.; **Jahn, O.**; Duran, K.J.; Monroe, G.R.; Ryan, T. A.; Taschenberger, H.; Dittman, J.S.; Rhee, J.-S.; Visser, G.; Jans, J.J.; Brose, N. Synaptic UNC13A protein variant causes increased neurotransmission and dyskinetic movement disorder. *Journal of Clinical Investigation* 2017; **127**:1005-1008.
70. Kusch, K.; Uecker, M.; Liepold, T.; Möbius, W.; Hoffmann, C.; Neumann, H.; Werner, H.B.; **Jahn, O.** Partial immunoblotting of 2D-gels: A novel method to identify post-translationally modified proteins exemplified for the myelin acetylome. *Proteomes* 2017; **5**:3.

69. Hofhuis, J.; Schueren, F.; Nötzel, C.; Lingner, T.; Gärtner, J.; **Jahn, O.**; Thoms, S. The functional readthrough extension of malate dehydrogenase reveals a modification of the genetic code. *Open Biology* 2016; **6**:160246.
68. Beyer, I.; Rezaei-Ghaleh, N.; Klafki, H.-W.; **Jahn, O.**; Haußmann, U.; Wiltfang, J.; Zweckstetter, M.; Knölker, H.-J. Solid-phase synthesis and characterization of N-terminally elongated A β _{3-x} peptides. *Chemistry – A European Journal* 2016; **22**:8685-8693.
67. Dihazi, G.H.; **Jahn, O.**; Tampe, B.; Zeisberg, M.; Mueller, C.; Mueller, G.A.; Dihazi, H. Proteomic analysis of embryonic kidney development: Heterochromatin proteins as epigenetic regulators of nephrogenesis. *Scientific Reports* 2015; **5**:13951.
66. Ott, C.; Martens, H.; Hassouna, I.; Oliveira, B.; Erck, C.; Zafeiriou, M.-P.; Peteri, U.-K.; Hesse, D.; Gerhart, S.; Altas, B.; Kolbow, T.; Stadler, H.; Kawabe, H.; Zimmermann, W.-H.; Nave, K.-A.; Schulz-Schaeffer, W.; **Jahn, O.**; Ehrenreich, H. Widespread expression of erythropoietin receptor in brain and its induction by injury. *Molecular Medicine* 2015; **21**:803-815.
65. Melin, J.; Kilisch, M.; Neumann, P.; Lytovchenko, O.; Gomkale, R.; Schendzielorz, A.; Schmidt, B.; Liepold, T.; Ficner, R.; **Jahn, O.**; Rehling, P.; Schulz, C. A presequence-binding groove in Tom70 supports import of Mdl1 into mitochondria. *Biochimica et Biophysica Acta - Molecular Cell Research* 2015; **1853**:1850-1859.
64. Ritz, S.; Schöttler, S.; Kotmann, N.; Baier, G.; Musyanovych, A.; Kuharev, J.; Landfester, K.; Schild, H.; **Jahn, O.**; Tenzer, S.; Mailänder, V. The protein corona of nanoparticles: distinct proteins regulate the cellular uptake. *Biomacromolecules* 2015; **16**:1311-1321.
63. Blaschke, S.; Rinke, K.; Maring, M.; Flad, T.; Patschan, S.; **Jahn, O.**; Mueller, C.A.; Mueller, G.A.; Dihazi, H. Haptoglobin- α 1, - α 2, vitamin D-binding protein and apolipoprotein C-III as predictors of etanercept drug response in rheumatoid arthritis. *Arthritis Research & Therapy* 2015; **17**:45.
62. Kuharev, J.; Navarro, P.; Distler, U.; **Jahn, O.**; Tenzer, S. In-depth evaluation of software tools for data-independent acquisition-based label-free quantification. *Proteomics* 2015; **15**:3140-3151.
61. Matz, A.; Lee, S.-J.; Schwedhelm-Domeyer, N.; Zanini, D.; Holubowska, A.; Kannan, M.; Farnworth, M.; **Jahn, O.**; Göpfert, M.C.; Stegmüller, J. Regulation of neuronal survival and morphology by the E3 ubiquitin ligase RNF157. *Cell Death & Differentiation* 2015; **22**:626-642.
60. Kratzke, M.; Candiello, E.; Schmidt, B.; **Jahn, O.**; Schu, P. AP-1/ σ 1B-dependent SV protein recycling is regulated in early endosomes and is coupled to AP-2 endocytosis. *Molecular Neurobiology* 2015; **52**:142-161.

59. Pettelkau, J.; Ihling, C.H.; Froberg, P.; van Werven, L.; *Jahn, O.; Sinz, A. Reliable identification of cross-linked products in protein interaction studies by ¹³C-labeled p-benzoylphenylalanine. *Journal of The American Society for Mass Spectrometry* 2014; **25**:1628-1641 (*co-corresponding author).
58. Melin, J.; Schulz, C.; Wrobel, L.; Bernhard, O.; Chacinska, A; Jahn, O.; Schmidt, B.; Rehling, P. Presequence recognition by the Tom40 channel contributes to precursor translocation into the mitochondrial matrix. *Molecular and Cellular Biology* 2014; **34**:3473-3485.
57. Biesemann, C.; Grønborg, M.; Luquet, E.; Wichert, S.P.; Bernard, V.; Bungers, S.R.; Cooper, B.; Varoquaux, F.; Li, L.; Byrne, J.A.; Urlaub, H.; Jahn, O.; Brose, N.; Herzog, E. Proteomic screening of glutamatergic mouse brain synaptosomes isolated by fluorescence activated sorting. *EMBO Journal* 2014; **33**:157-170.
56. Buhl, T.; Braun, A.; Forkel, S.; Möbius, W.; van Werven, L.; Jahn, O.; Rezaei-Ghaleh, N.; Zweckstetter, M.; Mempel, M.; Schön, M.P.; Haenssle, H.A. Internalization routes of cell-penetrating melanoma antigen peptides into human dendritic cells. *Experimental Dermatology* 2014; **23**:20-26.
55. Heurich, A.; Hofmann-Winkler, H.; Gierer, S.; Liepold, T.; Jahn, O.; Pöhlmann, S. TMPRSS2 and ADAM17 cleave ACE2 differentially and only proteolysis by TMPRSS2 augments entry driven by the severe acute respiratory syndrome coronavirus spike protein. *Journal of Virology* 2014; **88**:1293-1307.
54. Nieber, F.; Hedderich, M.; Jahn, O.; Pieler, T.; Henningfeld, K.A. NumbL is essential for *Xenopus* primary neurogenesis. *BMC Developmental Biology* 2013; **13**:36.
53. Herbst, S.; Maucher, D.; Schneider, M.; Ihling, C.H.; Jahn, O.; Sinz, A. Munc13-like skMLCK variants cannot mimic the unique calmodulin binding mode of Munc13 as evidenced by chemical cross-linking and mass spectrometry. *PLoS One* 2013; **8**:e75119.
52. Haußmann, U.; Jahn, O.; Linning, P.; Janßen, C.; Liepold, T.; Portelius, E.; Zetterberg, H.; Bauer, C.; Schuchhardt, J.; Knölker, H.-J.; Klafki, H.; Wiltfang, J. Analysis of amino-terminal variants of amyloid-β peptides by capillary isoelectric focussing immunoassay. *Analytical Chemistry* 2013; **85**:8142-8149.
51. Nawaz, S.; Schweitzer, J.; Jahn, O.; Werner, H.B. Molecular evolution of myelin basic protein, an abundant structural myelin component. *Glia* 2013; **61**:1364-1377.
50. Schmidt, C.; Hesse, D.; Raabe, M.; Urlaub, H.; Jahn, O. An automated in-gel digestion / iTRAQ-labeling workflow for robust quantification of gel-separated proteins. *Proteomics* 2013; **13**:1417-1422.

49. Dihazi, G.H.; Bibi, A.; **Jahn, O.**; Nolte, J.; Mueller, G.A.; Engel, W.; Dihazi, H. Impact of the antiproliferative agent ciclopirox olamine treatment on stem cells proteome. *World Journal of Stem Cells* 2013; **5**:9-25.
48. Jesse, S.; Lehnert, S.; **Jahn, O.**; Parnetti, L.; Soininen, H.; Herukka, S.-K.; Steinacker, P.; Tawfik, S.; Tumani, H.; von Arnim, C.A.F.; Neumann, M.; Kretschmar, H.A.; Kulaksiz, H.; Lenter, M.; Wiltfang, J.; Ferger, B.; Hengerer, B.; Otto, M. Differential sialylation of Serpin A1 in the early diagnosis of Parkinson's disease dementia. *PLoS One* 2012; **7**:e48783.
47. Lipstein, N., Schaks, S., Dimova, K., Kalkhof, S., Ihling, C., Kölbl, K., Ashery, U., Rhee, J., Brose, N., Sinz, A., Jahn, O. Nonconserved Ca²⁺/calmodulin binding sites in Munc13s differentially control synaptic short-term plasticity. *Molecular and Cellular Biology* 2012; **32**:4628-4641.
46. Patzig, J.; ***Jahn, O.**; Tenzer, S.; Wichert, S.P.; de Monasterio-Schrader, P.; Rosfa, S.; Kuharev, J.; Yan, K.; Bormuth, I.; Bremer, J.; Aguzzi, A.; Orfaniotou, F.; Hesse, D.; Schwab, M.H.; Möbius, W.; Nave, K.-A.; Werner, H.B. Quantitative and integrative proteome analysis of peripheral nerve myelin identifies novel myelin proteins and candidate neuropathy loci. *Journal of Neuroscience* 2011; **31**:16369-16386 (*co-first author).
45. Schulz, C.; Lytovchenko, O.; Melin, J.; Chacinska, A.; Guiard, B.; Neumann, P.; Ficner, R.; ***Jahn, O.**; Schmidt, B.; Rehling, P. Tim50's presequence receptor domain is essential for signal driven transport across the TIM23 complex. *Journal of Cell Biology* 2011; **195**:643-656 (*co-corresponding author).
44. Bertram, S.; Glowacka, I.; Müller, M.A.; Lavender, H.; Gnirß, K.; Nehlmeier, I.; Niemeyer, D.; He, Y.; Simmons, G.; Drosten, C.; Soilleux, E.J.; **Jahn, O.**; Steffen, I.; Pöhlmann, S. Cleavage and activation of the severe acute respiratory syndrome coronavirus spike protein by human airway trypsin-like protease (HAT). *Journal of Virology* 2011; **85**:13363-13372.
43. Tauber, S.C.; Ribes, S.; Ebert, S.; Heinz, T.; Fingerle, V.; Bunkowski, S.; Kugelstadt, D.; Spreer, A.; **Jahn, O.**; Eiffert, H.; Nau, R. Long-term intrathecal infusion of outer surface protein C from *Borrelia burgdorferi* causes axonal damage. *Journal of Neuropathology & Experimental Neurology* 2011; **70**:748-757.
42. Morgenroth, A.; Urusova, E.A.; Dinger, C.; Al-Momani, E.; Kull, T.; Glatting, G.; Frauendorf, H.; **Jahn, O.**; Mottaghy, F.M.; Reske, S.N.; Zlatopolskiy, B.D. New molecular markers for prostate tumor imaging: A study on 2-methylene substituted fatty acids as new AMACR inhibitors. *Chemistry – A European Journal* 2011; **17**:10144-10150.

41. Ribbe, K.; Ackermann, V.; Schwitulla, J.; Begemann, M.; Papiol, S.; Grube, S.; Sperling, S.; Friedrichs, H.; **Jahn, O.**; Sillaber, I.; Gefeller, O.; Krampe, H.; Ehrenreich, H. Prediction of the risk of comorbid alcoholism in schizophrenia by interaction of common genetic variants in the corticotropin-releasing factor system. *Archives of General Psychiatry* 2011; **68**:1247-1256.
40. Schieb, H.; Kratzin, H.; **Jahn, O.**; Moebius, W.; Rabe, S.; Staufenbiel, M.; Wiltfang, J.; Klafki, H.W. β -Amyloid peptide variants in brains and cerebrospinal fluid from APP transgenic mice: Comparison with human Alzheimer's amyloid. *Journal of Biological Chemistry* 2011; **286**:33747-33758.
39. Pesic, I.; Stefanovic, V.; Müller, G.A.; Müller, C.A.; Cukuranovic, R.; **Jahn, O.**; Bojanic, V.; Koziolok, M.; Dihazi, H. Identification and validation of six proteins as marker for endemic nephropathy. *Journal of Proteomics* 2011; **74**:1994-2007.
38. Dihazi, H.; Dihazi, G.H.; **Jahn, O.**; Meyer, S.; Nolte, J.; Asif, A.R.; Mueller, G.A.; Engel, W. Multipotent adult germline stem cells and embryonic stem cells functional proteomics revealed an important role of eukaryotic initiation factor 5A (Eif5a) in stem cell differentiation. *Journal of Proteome Research* 2011; **10**:1962-1973.
37. Pesic, I.; Dihazi, G.H.; Müller, G.A.; **Jahn, O.**; Hoffmann, M.; Eltoweissy, M.; Koziolok, M.; Dihazi, H. Short-time increase of glucose concentration in PDS results in extensive removal and high glycation level of vital proteins during continuous ambulatory peritoneal dialysis. *Nephrology Dialysis Transplantation* 2011; **26**:2674-2683.
36. Sussulini, A.; Dihazi, H.; Banzato, C.E.; Arruda, M.A.; Stühmer, W.; Ehrenreich, H.; ***Jahn, O.**; Kratzin, H. Apolipoprotein A-I as a candidate serum marker for the response to lithium treatment in bipolar disorder. *Proteomics* 2011; **11**:261-269 (*co-corresponding author).
35. Burgalossi, A.; Jung, S.; Meyer, G.; Jockusch, W.J.; **Jahn, O.**; Taschenberger, H.; O'Connor, V.M.; Nishiki, T.; Takahashi, M.; Brose, N.; Rhee, J.-S. SNARE protein recycling by α SNAP and β SNAP supports synaptic vesicle priming. *Neuron* 2010; **68**:473-487.
34. Löber, J.; Claußen, M.; **Jahn, O.**; Pieler, T. Interactions of 42Sp50 with the vegetal RNA localization machinery in *Xenopus laevis* oocytes. *FEBS Journal* 2010; **277**:4722-4731.
33. Sussulini, A.; Kratzin, H.; **Jahn, O.**; Banzato, C.E.; Arruda, M.A.; Becker, J.S. Metallomics studies of human blood serum from treated bipolar disorder patients. *Analytical Chemistry* 2010; **82**:5859-5864.
32. Jesse, S.; Steinacker, P.; Lehnert, S.; Sdzuj, M.; Cepek, L.; Tumani, H.; **Jahn, O.**; Schmidt, H.; Otto, M. A proteomic approach for the diagnosis of bacterial meningitis. *PLoS One* 2010; **5**:e10079.

31. Kawabe, H.; Neeb, A.; Dimova, K.; Young, S.M.; Takeda, M.; Katsurabayashi, S.; Mitkovski, M.; Malakhova, O.A.; Zhang, D.-E.; Umikawa, M.; Kariya, K.; Goebbels, S.; Nave, K.-A.; Rosenmund, C.; **Jahn, O.**; Rhee, J.-S.; Brose, N. Regulation of Rap2A by the ubiquitin ligase Nedd4-1 controls neurite development. *Neuron* 2010; **65**:358-372.
30. Steinacker, P.; Hawlik, A.; Lehnert, S.; **Jahn, O.**; Meier, S.; Görz, E.; Braunstein, K.E.; Krzovska, M.; Schwalenstöcker, B.; Jesse, S.; Pröpper, C.; Böckers, T.; Ludolph, A.; Otto, M. Neuroprotective function of cellular prion protein in a mouse model of amyotrophic lateral sclerosis. *American Journal of Pathology* 2010; **176**:1409-1420.
29. Rodriguez-Castaneda, F.; Maestre-Martinez, M.; Coudeville, N.; Dimova, K.; Junge, H.; Lipstein, N.; Lee, D.; Becker, S.; Brose, N.; **Jahn, O.**; Carlomagno, T.; Griesinger, C. Modular architecture of Munc13/calmodulin complexes: Dual regulation by Ca²⁺ and possible function in short-term synaptic plasticity. *EMBO Journal* 2010; **29**:680-691.
28. Linker, R.A.; Brechlin, P.; Jesse, S.; Steinacker, P.; Lee, D.H.; Asif, A.R.; **Jahn, O.**; Tumani, H.; Gold, R.; Otto, M. Proteome profiling in murine models of multiple sclerosis: Identification of stage specific markers and culprits for tissue damage. *PLoS One* 2009; **4**:e7624.
27. Galli, S.; **Jahn, O.**; Hitt, R.; Hesse, D.; Opitz, L.; Plessmann, U.; Urlaub, H.; Poderoso, J.J.; Jares-Erijman E.A.; Jovin, T.M. A new paradigm for MAPK: Structural interactions of hERK1 with mitochondria in HeLa cells. *PLoS One* 2009; **4**:e7541.
26. Dihazi, H.; Dihazi, G.H.; Nolte, J.; Meyer, S.; **Jahn, O.**; Mueller, G.A.; Engel, W. Multipotent adult germline stem cells and embryonic stem cells: Comparative proteomic approach. *Journal of Proteome Research* 2009; **8**:5497-5510.
25. Dimova, K.; Kalkhof, S.; Pottratz, I.; Ihling, C.; Rodriguez-Castaneda, F.; Liepold, T.; Griesinger, C.; Brose, N.; Sinz, A.; **Jahn, O.** Structural insights into the calmodulin - Munc13 interaction obtained by cross-linking and mass spectrometry. *Biochemistry* 2009; **48**:5908-5921.
24. Arthur, P.K.; Claußen, M.; Koch, S.; Tarbashevich, K.; **Jahn, O.**; Pieler, T. Participation of Xenopus ELR-type proteins in vegetal mRNA localization during oogenesis. *Journal of Biological Chemistry* 2009; **284**:19982-19992.
23. Tezval, H.; Jurk, S.; Atschekzei, F.; Becker, J.U.; **Jahn, O.**; Serth, J.; Kuczyk, M.A. Urocortin and corticotropin-releasing factor receptor 2 in human renal cell carcinoma: Disruption of an endogenous inhibitor of angiogenesis and proliferation. *World Journal of Urology* 2009; **27**:825-830.
22. Tezval, H.; Merseburger, A.S.; Serth, J.; Herrmann, T.W.; Becker, J.U.; **Jahn, O.**; Kuczyk, M.A. Differential expression of urocortin in human testicular germ cells in course of spermatogenesis: Role for urocortin in male fertility? *Urology* 2009; **73**:901-905.

21. Uhrig, M.; Brechlin, P.; **Jahn, O.**; Knyazev, Y.; Weninger, A.; Busia, L.; Honarnejad, K.; Otto, M.; Hartmann, T. Upregulation of CRABP1 in human neuroblastoma cells overproducing the Alzheimer-typical A β 42 reduces their differentiation potential. *BMC Medicine* 2008; **6**:38.
20. Brechlin, P.; **Jahn, O.**; Steinacker, P.; Cepek, L.; Kratzin, H.; Lehnert, S.; Jesse, S.; Mollenhauer, B.; Kretzschmar, H.A.; Wiltfang, J.; Otto, M. Cerebrospinal fluid-optimized two-dimensional difference gel electrophoresis (2-D DIGE) facilitates the differential diagnosis of Creutzfeldt-Jakob disease. *Proteomics* 2008; **8**:4357-4366.
19. Reumann, S.; Babujee, L.; Ma, C.; Wienkoop, S.; Siemsen, T.; Antonicelli, G.E.; Rasche, N.; Lüder, F.; Weckwerth, W.; **Jahn, O.** Proteome analysis of Arabidopsis leaf peroxisomes reveals novel targeting peptides, metabolic pathways, and defense mechanisms. *Plant Cell* 2007; **19**:3170-3193.
18. Werner, H.B.; Kuhlmann, K.; Shen, S.; Uecker, M.; Schardt, A.; Dimova, K.; Orfaniotou, F.; Dhaunchak, A.; Brinkmann, B.G.; Möbius, W.; Guarente, L.; Casaccia-Bonnel, P.; **Jahn, O.**; Nave, K.-A. Proteolipid protein is required for transport of Sirtuin 2 into CNS myelin. *Journal of Neuroscience* 2007; **27**:7717-7730.
17. Todorovic, C.; Radulovic, J.; **Jahn, O.**; Radulovic, M.; Sherrin, T.; Hippel, C.; Spiess, J. Differential activation of CRF receptor subtypes removes stress-induced memory deficit and anxiety. *European Journal of Neuroscience* 2007; **25**:3385-3397.
16. Dimova, K.; Kawabe, H.; Betz, A.; Brose, N.; **Jahn, O.** Characterization of the Munc13-calmodulin interaction by photoaffinity labeling. *Biochimica et Biophysica Acta - Molecular Cell Research* 2006; **1763**:1256-1265.
15. **Jahn, O.**; Hesse, D.; Reinelt, M.; Kratzin, H.D. Technical innovations for the automated identification of gel-separated proteins by MALDI-TOF mass spectrometry. *Analytical and Bioanalytical Chemistry* 2006; **386**:92-103.
14. Ma, C.; Haslbeck, M.; Babujee, L.; **Jahn, O.**; Reumann, S. Identification and characterization of a stress-inducible and a constitutive small heat shock protein targeted to the matrix of plant peroxisomes. *Plant Physiology* 2006; **141**:47-60.
13. Steinacker, P.; Schwarz, P.; Reim, K.; Brechlin, P.; **Jahn, O.**; Kratzin, H.; Aitken, A.; Wiltfang, J.; Aguzzi, A.; Bahn, E.; Baxter, H.C.; Brose, N.; Otto, M. Unchanged survival rates of 14-3-3 γ knock-out mice after inoculation with pathological prion protein. *Molecular and Cellular Biology* 2005; **25**:1339-1346.
12. Stiedl, O.; Meyer, M.; **Jahn, O.**; Ögren, S.O.; Spiess, J. Corticotropin-releasing factor receptor 1 and central heart rate regulation in mice during expression of conditioned fear. *Journal of Pharmacology and Experimental Therapeutics* 2005; **312**:905-916.

11. Junge, H.J.; Rhee, J.-S.; **Jahn, O.**; Varoquaux, F.; Spiess, J.; Waxham, M.N.; Rosenmund, C.; Brose, N. Calmodulin and Munc13 form a Ca²⁺ sensor/effector complex that controls short-term synaptic plasticity. *Cell* 2004; **118**:389-401.
10. **Jahn, O.**; Tezval, H.; van Werven, L.; Eckart, K.; Spiess, J. Three-amino acid motifs of urocortin II and III determine their CRF receptor subtype selectivity. *Neuropharmacology* 2004; **47**:233-242.
9. Tezval, H.; ***Jahn, O.**; Todorovic, C.; Sasse, A.; Eckart, K.; Spiess, J. Cortagine, a specific agonist of corticotropin-releasing factor receptor subtype 1, is anxiogenic and antidepressive in the mouse model. *Proceedings of the National Academy of Sciences of the United States of America* 2004; **101**:9468-9473 (*co-first author).
8. **Jahn, O.**; Eckart, K.; Tezval, H.; Spiess, J. Characterization of peptide-protein interactions using photoaffinity labeling and LC/MS. *Analytical and Bioanalytical Chemistry* 2004; **378**:1031-1036.
7. **Jahn, O.**; Tezval, H.; Spiess, J.; Eckart, K. Tandem mass spectrometric characterization of branched peptides derived from photoaffinity labeling. *International Journal of Mass Spectrometry* 2003; **228**:527-540.
6. **Jahn, O.**; Eckart, K.; Brauns O.; Tezval, H.; Spiess, J. The binding protein of corticotropin-releasing factor: Ligand-binding site and subunit structure. *Proceedings of the National Academy of Sciences of the United States of America* 2002; **99**:12055-12060.
5. Brauns, O.; Brauns, S.; Zimmermann, B.; **Jahn, O.**; Spiess, J. Differential responsiveness of CRF receptor subtypes to N-terminal truncation of peptidic ligands. *Peptides* 2002; **23**:881-888.
4. Eckart, K.; **Jahn, O.**; Radulovic, J.; Tezval, H.; van Werven, L.; Spiess, J. A single amino acid serves as a switch between the receptor and the binding protein of corticotropin-releasing factor: Implications for the design of agonists and antagonists. *Proceedings of the National Academy of Sciences of the United States of America* 2001; **98**:11142-11147.
3. Hofmann, B.A.; Sydow, S.; **Jahn, O.**; van Werven, L.; Liepold, T.; Eckart, K.; Spiess, J. Functional and protein chemical characterization of the N-terminal domain of the rat corticotropin-releasing factor receptor. *Protein Science* 2001; **10**:2050-2062.
2. **Jahn, O.**; Eckart, K.; Sydow, S.; Hofmann, B.A.; Spiess, J. Pharmacological characterization of recombinant rat corticotropin releasing factor binding protein using different sauvagine analogs. *Peptides* 2001; **22**:47-56.
1. Tsikas, D.; Schwedhelm, E.; Gutzki, F.M.; **Jahn, O.**; Fakistas, P.; Frolich, J.C. Enzymatic Synthesis of dioxygen-18 labeled 8-epi-prostaglandin F-2-alpha and its use in quantitative GC-Tandem MS. *Journal of Labelled Compounds and Radiopharmaceuticals* 1997; **39**:531-540.

10. Lipstein, N.; Göth, M.; Piotrowski, C.; Pagel, K.; Sinz, A.; **Jahn, O.** Presynaptic Calmodulin targets: lessons from structural proteomics. *Expert Review of Proteomics* 2017; **14**:223-242.
9. Herbst, S.; Lipstein, N.; **Jahn, O.**; Sinz, A. Structural insights into calmodulin/Munc13 interaction. *Biological Chemistry* 2014; **395**:763-768.
8. de Monasterio-Schrader, P.; **Jahn, O.**; Tenzer, S.; Wichert, S.P.; Patzig, J.; Werner, H.B. Systematic approaches to central nervous system myelin. *Cellular and Molecular Life Sciences* 2012; **69**:2879-2894.
7. Otto, M.; Bowser, R.; Turner, M.; Berry, J.; Brettschneider, J.; Connor, J.; Costa, J.; Cudkovicz, M.; Glass, J.; **Jahn, O.**; Lehnert, S.; Malaspina, A.; Parnetti, L.; Petzold, A.; Shaw, P.; Sherman, A.; Steinacker, P.; Süßmuth, S.; Teunissen, C.; Tumani, H.; Wuolikainen, A.; Ludolph, A. Roadmap and standard operating procedures for biobanking and discovery of neurochemical markers in ALS. *Amyotrophic Lateral Sclerosis* 2012; **13**:1-10.
6. **Jahn, O.**; Tenzer, S.; Werner, H.B. Myelin proteomics: Molecular anatomy of an insulating sheath. *Molecular Neurobiology* 2009; **40**:55-72.
5. Todorovic, C.; **Jahn, O.**; Tezval, H.; Hippel, C.; Spiess, J. The role of CRF receptors in anxiety and depression: Implications of the novel CRF₁ agonist cortagine. *Neuroscience and Biobehavioral Reviews* 2005; **29**:1323-1333.
4. **Jahn, O.**; Radulovic, J.; Stiedl, O.; Tezval, H.; Eckart, K.; Spiess, J. Corticotropin-releasing factor binding protein – a ligand trap? *Mini-Reviews in Medicinal Chemistry* 2005; **5**:953-960.
3. Eckart, K.; **Jahn, O.**; Radulovic, J.; Radulovic, M.; Blank, T.; Stiedl, O.; Brauns, O.; Tezval, H.; Zeyda, T.; Spiess, J. Pharmacology and biology of corticotropin-releasing factor receptors. *Receptors and Channels* 2002; **8**:163-177.
2. **Jahn, O.**; Hofmann, B.A.; Brauns, O.; Spiess, J.; Eckart, K. The use of multiple ion chromatograms in on-line HPLC-MS for the characterization of posttranslational and chemical modifications of proteins. *International Journal of Mass Spectrometry* 2002; **214**:37-51.
1. Eckart, K.; Radulovic, J.; Radulovic, M.; **Jahn, O.**; Blank, T.; Stiedl, O.; Spiess, J. Actions of CRF and its analogs. *Current Medicinal Chemistry* 1999; **6**:1035-1053.

Book Chapters

3. Erwig, M.S.; Hesse, D.; Jung, R.B.; Uecker, M.; Kusch, K.; Tenzer, S.; ***Jahn, O.**; Werner, H.B. Myelin: Methods for purification and proteome analysis. *Methods in Molecular Biology* 2019; **1936**:37-63 (*co-corresponding author).
2. Altas, B.; **Jahn, O.**; Kawabe, H. Biochemical purification of binding partners of synaptic scaffold proteins. *Methods in Molecular Biology* 2017; **1538**:69-82.
1. **Jahn, O.**; Tenzer, S.; Bartsch, N.; Patzig, J.; Werner, H.B. Myelin proteome analysis: Methods and implications for the myelin cytoskeleton. In: Dermietzel, R. (ed.); *The cytoskeleton: Imaging, isolation, and interaction. Neuromethods* vol. 79, 335-353, Springer 2013.

Protocols

1. Dihazi, G.; Eltoweissy, M.Y.; **Jahn, O.**; Dihazi, H. Immunofluorescence staining of the kidney sections. *Bio-protocol* 2021; bio-protocol.org/prep1241.

Editorials

1. Werner, H.B. & **Jahn, O.** Myelin matters: Proteomic insights into white matter disorders. *Expert Review of Proteomics* 2010; **7**:159-164.

Meeting Reports

3. Valerius, O.; Asif, A.R.; Beißbarth, T.; Bohrer, R.; Dihazi, H.; Feussner, K.; Feussner, I.; **Jahn, O.**; Majcherczyk, A.; Schmidt, B.; Schmitt, K.; Urlaub, H.; Lenz, C. Mapping cellular microenvironments: Proximity labeling and complexome profiling (Seventh Symposium of the Göttingen Proteomics Forum). *Cells* 2019; **8**:1192.
2. Dihazi, H.; Asif, A.R.; Beißbarth, T.; Bohrer, R.; Feussner, K.; Feussner, I.; **Jahn, O.**; Lenz, C.; Majcherczyk, A.; Schmidt, B.; Schmitt, K.; Urlaub, H.; Valerius, O. Integrative omics - from data to biology. *Expert Review of Proteomics* 2018; **15**:463-466.
1. Dihazi, H.; Bohrer, R.; **Jahn, O.**; Lenz, C.; Majcherczyk, A.; Schmidt, B.; Urlaub, H.; Valerius, O.; Asif, A.R. Mass spectrometry imaging: linking molecule profiles to tissue spatial distribution. *Expert Review of Proteomics* 2013; **10**:17-20.

Articles in German

5. **Jahn, O.**; Tenzer, S.; Werner, H.B. Proteomanalyse des Myelins, der Isolierschicht der Nerven. *Biospektrum* 2013; **19**:263-265. DOI: 10.1007/s12268-013-0305-1.
4. Schaks, S.; Kalkhof, S.; Krauth, F.; **Jahn, O.**; Sinz, A. Chemisches Cross-Linking und MS zur Untersuchung von Proteinkomplexen. *Biospektrum* 2011; **17**:524-527. DOI: 10.1007/s12268-011-0083-6.
3. **Jahn, O.**: Automation gelbasierter Proteom-Analysen: Neue Einblicke in Säugetier-Myelin und Pflanzen-Peroxisomen. *Bioforum* 2008; **5**:36-38.
2. **Jahn, O.**; Hesse, D.; Liepold, T.; Reinelt, M.; Kratzin, H.D. Automatisierter Protein-In-Gel-Verdau für MALDI-TOF-MS. *Laborwelt* 2007; **8**:6-9.
1. **Jahn, O.**; Hesse, D.; Liepold, T.; Reinelt, M.; Kratzin, H.D. Automatisierter Protein-In-Gel-Verdau für MALDI-TOF-MS. *Transkript* 2006; **12**:44-45.