# CURRICULUM VITAE

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## PERSONAL INFORMATION

Nationality: Swiss
Date of Birth: 3 May 1965
Place of Birth: Basel, Switzerland
Marital Status: Married

**Language:**

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| German: | Native |
| English: | Excellent oral/written |
| French: | Basic oral/written |

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## EDUCATION

**Habilitation**, University of Basel, Switzerland, 2000 – present.

**Ph.D. in Biochemistry**, Biozentrum, University of Basel, Switzerland, 1993 – 1996. *Summa cum laude* graduation.

**Diploma in Biochemistry**, Biozentrum, University of Basel, Switzerland. 1986 – 1992. Thesis at Friedrich Miescher Institut, Basel, Switzerland.

**Matura Typus B**, Gymnasium Münchenstein, Münchenstein, Switzerland. 1980 – 1984.

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## PROFESSIONAL EXPERIENCE

**Group Leader**, Laboratory of Biomolecular Research, Paul Scherrer Institut, Villigen PSI, Switzerland. From January 2014.

**Senior Scientist, Head of the Gene to Structure Pipeline and the PSI Protein Production Platform**, Laboratory of Biomolecular Research, Paul Scherrer Institut, Villigen PSI, Switzerland. October 2010-December 2014.

**Reader**, Faculty of Life Sciences, University of Manchester, United Kingdom, 2007-2010.

**Wellcome Trust Senior Research Fellow in Basic Biomedical Science**, Cells to Tissues Section, Faculty of Life Sciences, University of Manchester, United Kingdom, 2004-2010.

**Wellcome Trust Research Career Development Fellow**, Division of Matrix Biology, Faculty of Life Sciences, University of Manchester, United Kingdom, 2000-2004.

**Post Doctoral Research Associate**, Department of Biophysical Chemistry, Biozentrum, University of Basel, Switzerland. 1996 – 2000.

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**AWARDS**

**2004:** Wellcome Trust Senior Research Fellowship in Basic Biomedical Science

**1999:** Wellcome Trust Research Career Development Fellowship

**1999:** Ammerbach-Prize of the University of Basel, Switzerland, for outstanding research achievements.

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**LIST OF PUBLICATIONS**

**2022**

98. Nass, KJ, Ilie, IM, Saller, MJ, Driessen, AJM, Caflisch, A, **Kammerer, RA** and Li, X (2022) The role of the N-terminal amphipathic helix in bacterial YidC: Insights from functional studies, the crystal structure and molecular dynamics simulations. Biochim Biophys Acta Biomembr 1864, 183825.

**2021**

97. Leka, O, Wu, Y, Li, X and **Kammerer, RA** (2021) Crystal structure of the catalytic domain of botulinum neurotoxin subtype A3. J Biol Chem 296, 100684.

96. Choo, JPS, **Kammerer, RA**, Li, X and Li, Z (2021) High-level production of phenylacetaldehyde using fusion-tagged styrene oxide isomerase. Adv Synth Catal 363, 1714-1721.

**2020**

95. Fiedler, T, Fabrice, TN, Studer, V, Vinet, A, Faltova, L, **Kammerer, RA**, Steinmetz, MO, Sharpe, T and Pieters J (2020) Homodimerization of coronin A through the C-terminal coiled-coil domain Is essential for multicellular differentiation of Dictyostelium discoideum. FEBS Lett 594, 2116-2127.

94. Li, X, Brunner, C, Wu, Y, Leka, O, Schneider, G and **Kammerer RA** (2020) Structural insights into the interaction of botulinum neurotoxin A with its neuronal receptor SV2C. Toxicon 175, 36-43.

**2019**

93. Faltova, L, Jiang, K, Frey, D, Wu, Y, Capitani, G, Prota, AE, Akhmanova, A, Steinmetz, MO and **Kammerer RA** (2019) Crystal structure of a heterotetrameric katanin p60:p80 complex. Structure 27, 1375-1383.

**2018**

92. Jiang K, Faltova, L, Hua, S, Capitani, G, Prota, AE, Landgraf, C, Volkmer, R, **Kammerer, RA**, Steinmetz, MO and Akhmanova, A (2018) Structural basis of formation of the microtubule minus-end-regulating CAMSAP-katanin complex. Structure 26, 375-382.

**2017**

91. Vercellino, I, Rezabkova, L, Olieric, V, Polyhach, Y, Weinert, T, **Kammerer, RA**, Jeschke, G and Korkhov, VM (2017) Role of the nucleotidyl cyclase helical domain in catalytically active dimer formation. Proc Natl Acad Sci USA 114, E9821-E9828.

90. Rezabkova, L, Jiang, K, Capitani, G, Prota, AE, Akhmanova, A, Steinmetz, MO and **Kammerer, RA** (2017) Structural basis of katanin p60:p80 complex formation. Sci Rep 7, 14893.

89. Kumar, A, Manatschal, C, Rai, A, Grigoriev, I, Degen, MS, Jaussi, R, Kretzschmar, I, Prota, AE, Volkmer, R, **Kammerer, RA**, Akhmanova, A and Steinmetz, MO (2017)

Short linear sequence motif LxxPTPh targets diverse proteins to growing microtubule ends. Structure 25, 924-932.

88. Burnett, A, Gomez, I, De Leon, DD, Ariaans, M, Progias, P, **Kammerer, RA**, Velasco, G, Marron, M, Hellewell, P and Ridger, V (2017) Angiopoietin-1 enhances neutrophil chemotaxis in vitro and migration in vivo through interaction with CD18 and release of CCL4. Sci Rep 7, 2332.

87. Jiang, K, Rezabkova, L, Hua, S, Liu, Q, Capitani, G, Altelaar, AF, Heck, AJR, **Kammerer, RA**, Steinmetz, MO and Akhmanova A (2017) Microtubule minus-end regulation at spindle poles by an ASPM-katanin complex. Nat Cell Biol 19, 480-492.

86. Benoit, RM, Schärer, MA, Wieser, MM, Li, X, Frey, D and **Kammerer, RA** (2017) Crystal structure of the BoNT/A2 receptor-binding domain in complex with the luminal domain of its neuronal receptor SV2C. Sci Rep 7, 43588.

85. Kaplan, AR, Brady, MR, Maciejewski, MW, **Kammerer, RA** and Alexandrescu AT (2017) Nuclear magnetic resonance structures of GCN4p are largely conserved when ion pairs are disrupted at acidic pH but show a relaxation of the coiled coil superhelix. Biochemistry 56, 1604-1619.

**2016**

84. Bianchi, S, van Riel, WE, Kraatz, SHW, Olieric, N, Frey, D, Katrukha, EA, Jaussi, R, Missimer, J, Grigoriev, I, Olieric, V, Benoit, RM, Steinmetz, MO, Akhmanova, A and **Kammerer, RA** (2016) Structural basis for misregulation of kinesin KIF21A autoinhibition by CFEOM1 disease mutations. Sci Rep 6, 300668.

83. Rezabkova, L, Kraatz, SH, Akhmanova, A, Steinmetz, MO and Kammerer, RA (2016) Biophysical and Structural Characterization of the Centriolar Protein Cep104 Interaction Network. J Biol Chem 291, 18496-18504.

82. Sharma, A, Aher, A, Dynes, NJ, Frey, D, Katrukha, EA, Jaussi, R, Grigoriev, I, Croisier, M, **Kammerer, RA**, Akhmanova, A, Gönczy, P and Steinmetz, MO (2016) Centriolar CPAP/SAS-4 imparts slow processive microtubule growth. Dev Cell 37, 362-376.

81. Hilbert, M, Noga, A, Frey, D, Hamel, V, Guichard, P, Kraatz, SHW, Pfreundschuh, M, Hosner, S, Flückiger, I, Jaussi, R, Wieser, MM, Thieltges, KM, Deupi, X, Müller, DJ, **Kammerer, RA**, Gönczy, P, Hirono, M and Steinmetz, MO (2016) SAS-6 engineering reveals interdependency between cartwheel and microtubule wall in determining centriole architecture. Nat Cell Biol 18, 393-403.

**2015**

80. Benoit, RM, Frey, D, Wieser, MM, Thieltges, KM, Jaussi, R, Capitani, G and **Kammerer, RA** (2015) Structure of the BoNT/A1 - receptor complex. Toxicon 107, 25-31.

**2014**

79. Kammerer, RA and Benoit RM (2014) Botulinum neurotoxins: new questions arising from structural biology. Trends Biochem Sci 39, 517-526.

78. Weber, S, Stirnimann, CU, Wieser, M, Frey, D, Meier, R, Engelhardt, S, Li, XD, Capitani, G, **Kammerer, RA** and Hilbi, H (2014) A type IV-translocated Legionella

cysteine phytase counteracts intracellular growth restriction by phytate. J Biol Chem 289, 34175-34188.

77. Stroud, MJ, Nazgiewicz, A, McKenzie, EA, Wang, **Kammerer, RA*** and Ballestrem, C* (2014) GAS2-like proteins mediate communication between microtubules and actin through interaction with end-binding proteins. J Cell Sci 127, 2672-2682. (*, joint last authors)

76. Jayachandran, R, Liu, X, BoseDasGupta, S, Mueller, P, Zhang, C-L, Moshous, D, Studer, V, Schneider, J, Genoud, C, Foussoud, C, Gambino, F, Khelfaoui, M, Mueller, C, Bartholdi, D, Rossez, H, Stiess, M, Houbaert, X, Jaussi, R, Frey, D, **Kammerer, RA**, Deupi, X, de Villartay, J-P, Luethi, A, Humeau, Y and Pieters, J (2014) Coronin 1 regulates cognition and behavior through modulation of cAMP/protein kinase A signaling. PLoS Biol 12, e1001820.

75. Alfieri, A, Ong, AC, **Kammerer, RA**, Solanky, T, Bate, S, Tasab, M, Brown, NJ, and Brookes ZL (2014) Angiopoietin-1 regulates microvascular reactivity and protects the microcirculation during acute endothelial dysfunction: role of eNOS and VE-cadherin. Pharmacol Res 80, 43-51.

74. Benoit, RM, Frey, D, Hilbert, M, Kevenaar, JT, Wieser, MM, Stirnimann, CU, McMillan, D, Ceska, T, Lebon, F, Jaussi, R, Steinmetz, MO, Schertler, GF, Hoogenraad, CC, Capitani, G and **Kammerer, RA** (2014) Structural basis for recognition of synaptic vesicle protein 2C by botulinum neurotoxin A. Nature 505, 108-111.

**2013**

73. Bjelic, S, Wieser, M, Frey, D, Stirnimann, CU, Chance, MR, Jaussi, R, Steinmetz, MO and **Kammerer, RA** (2013) Structural basis for the oligomerization-state switch from a dimer to a trimer of an engineered cortexillin-1 coiled-coil variant. PloS One 8, e63370

72. Holland, JP, Kang, A, Cohrs, S, Selivanova, SV, Milicevic Sephton, S, Betzel, T, Frey, D, Wieser, M, Jaussi, R, **Kammerer, RA**, Schibli, R and Fischer, E (2013) Synthesis and evaluation of biphenyl derivates as kinesin spindle protein inhibitors. Chem Biodivers 10, 538-555.

71. Prota, AE, Magiera, MM, Kuijpers, M, Bargsten, K, Frey, D, Wieser, M, Jaussi, R, Hoogenraad, CC, **Kammerer, RA**, Janke, C and Steinmetz, MO (2013) Structural basis of tubulin tyrosination by tubulin tyrosine ligase. J Cell Biol 200, 259-270.

**2012**

70. Alfieri, A, Watson, JJ, **Kammerer, RA**, Tasab, M, Progias, P, Reeves, K, Brown, NJ and Brookes, ZL. (2012) Angiopoietin-1 variant reduces LPS-induced microvascular dysfunction in a murine model of sepsis. Crit Care 16, R182.

69. Alves-Silva, J, Sánchez-Soriano, N, Beaven, R, Klein, M, Parkin, J, Millard, TH, Bellen, HJ, Venken, KJ, Ballestrem, C, **Kammerer, RA** and Prokop, A (2012) Spectraplakins promote microtubule-mediated axonal growth by functioning as structural microtubule-associated proteins and EB1-dependent +TIPs (tip interacting proteins). J Neurosci 32, 9143-9158.

68. Bjelić, S, De Groot, CO, Schärer, MA, Jaussi, R, Bargsten, K, Salzmann, M, Frey, D, Capitani, G, **Kammerer, RA** and Steinmetz, MO (2012) Interaction of mammalian end binding proteins with CAP-Gly domains of CLIP-170 and p150(glued). J Struct Biol 177, 160-167.

**2011**

67. Beecher, N, Roseman, AM, Jowitt, TA, Berry, R, Troilo, H, **Kammerer, RA**, Shuttleworth, CA, Kielty, CM and Baldock, C (2011) Collagen VI, conformation of A-domain arrays and microfibril architecture. J Biol Chem 286, 40266-40275.

66. Stroud, MJ, **Kammerer, RA*** and Ballestrem C* (2011) Characterization of G2L3 (GAS2-like 3), a new microtubule- and actin-binding protein related to spectraplakins. J Biol Chem 286, 24987-24995. (*, joint last authors)

**2010**

65. Ciani, B, Honnappa, S, Bjelic, S, Jawhari, H, Patel, S, Jaussi, R, Payapilly, A, Jowitt, T, Steinmetz, MO and **Kammerer, RA** (2010) Molecular basis of coiled-coil oligomerization state specificity. Proc Natl Acad Sci USA 107, 19850-19855.

64. Daly, SB, Urquhart, JE, Hilton, E, McKenzie, EA, **Kammerer, RA**, Lewis, M, Kerr, B, Stuart, H, Donnai, D, Long, DA, Burgu, B, Aydogdu, O, Derbent, M, Garcia-Minaur, S, Reardon, W, Gener, B, Shalev, S, Smith, R, Woolf, AS, Black, GC and Newman WG (2010) Mutations in HPSE2 cause urofacial syndrome. Am J Hum Genet 86, 963-969.

63. Lone, M, Kungl, T, Koper, A, Bottenberg, W, **Kammerer, RA**, Klein, M, Sweeney, ST, Auburn, RP, O'Kane, CJ and Prokop, A (2010) The nuclear protein Waharan is required for endosomal-lysosomal trafficking in Drosophila. J Cell Sci 123, 2369-2374.

62. Macdonald, PR, Lustig, A, Steinmetz, MO and **Kammerer, RA** (2010) Laminin chain assembly is regulated by specific coiled-coil interactions. J Struct Biol 170, 398-405.

**2009**

61. Berry, R, Jowitt, TA, Ferrand, J, Roessle, M, Grossmann, JG, Canty-Laird, EG, **Kammerer, RA**, Kadler, KE and Baldock C (2009) The role of dimerization and substrate exclusion in the regulation of bone morphogenetic protein-1 (BMP-1) and mammalian tolloid (mTLD). Proc Natl Acad Sci USA 106, 8561-8566.

60. Aguilar, HC, Ataman, ZA, Aspericueta, V, Fang, AQ, Stroud, M, Negrete, OA, **Kammerer, RA** and Lee, B (2009) A novel receptor-induced activation site in the Nipah virus attachment glycoprotein (G) involved in triggering the fusion glycoprotein (F). J Biol Chem 284, 1628-1635.

**2008**

59. Verel, R, Tomka, IT, Bertozzi, C, Cadalbert, R, **Kammerer, RA**, Steinmetz, MO and Meier, BH (2008) Polymorphism in an amyloid-like fibril-forming model peptide. Angew Chem Int Ed Engl 47, 5842-5845.

58. Steinmetz, MO, Gattin, Z, Verel, R, Ciani, B, Stromer, T, Green, JM, Tittmann, P, Schulze-Briese, C, Gross, H, van Gunsteren, WF, Meier, BH, Serpell, LC, Müller, SA and **Kammerer, RA** (2008) Atomic models of de novo designed cc$\beta$-Met amyloid-like fibrils. J Mol Biol 376, 898-912.

**2007**

57. Matousek, WM, Ciani, B, Fitch, CA, Garcia-Moreno, BE, **Kammerer, RA** and Alexandrescu, AT (2007) Electrostatic contributions to the stability of the GCN4 leucine zipper structure. J Mol Biol 374, 206-219.

56. O'Sallum, C, **Kammerer, RA** and Alexandrescu, AT (2007) Thermodynamic and structural studies of carbohydrate binding by the agrin-G3 domain. Biochemistry 46, 9541-9550.

55. Missimer, JH, Steinmetz, MO, Baron, R, Winkler, FK, **Kammerer, RA**, Daura, X and van Gunsteren, WF (2007) Configurational entropy elucidates the role of salt-bridge networks in protein thermostability. Protein Sci 16, 1349-1359.

54. Steinmetz, MO, Jelesarov, I, Matousek, WM, Honnappa, S, Jahnke, W, Missimer, J, Frank, S, Alexandrescu, AT and **Kammerer, RA** (2007) Molecular basis of coiled-coil formation. Proc Natl Acad Sci USA 104, 7062-7067.

**2006**

53. Macdonald, PR, Progias, P, Ciani, B, Patel, S, Mayer, U, Steinmetz, MO and **Kammerer, RA** (2006) Structure of the extracellular domain of Tie receptor tyrosine kinases and localization of the angiopoietin-binding epitope. J Biol Chem 281, 28408-28414.

52. **Kammerer, RA** and Steinmetz, MO (2006) De novo design of a two-stranded coiled-coil switch peptide. J Struct Biol 155, 146-153.

**2005**

51. **Kammerer, RA**, Kostrewa, D, Progias, P, Honnappa, S, Avilla, D, Lustig, A, Winkler, FK, Pieters, J, and Steinmetz, MO (2005) A conserved trimerization motif controls the topology of short coiled coils. Proc Natl Acad Sci USA 102, 13891-13896.

50. Kim, K-T, Choi, HH, Steinmetz, MO, Maco, B, **Kammerer, RA**, Ahn, SY, Kim, HZ, Lee, GM and Koh, GY (2005) Oligomerization and multimerization is critical for angiopoietin-1 to bind and phosphorylate Tie2. J Biol Chem 280, 20126-20131.

49. Steinmetz, MO, García-Echeverría, C and **Kammerer, RA** (2005) Design of a coiled coil-based model peptide system to explore the fundamentals of amyloid formation. Int J Pept Res Ther 11, 43-52.

48. Mould, AP, Travis, MA, Barton, SJ, Hamilton, JA, Askari, JA, Craig, SE, Macdonald, PR, **Kammerer, RA**, Buckley, PA and Humphries, MJ (2005) Evidence that monoclonal antibodies directed against the integrin $\beta$ subunit PSI domain stimulate function by inducing receptor extension. J Biol Chem 280, 4238-4246.

**2004**

47. Bariola, PA, Retelska, D, Stasiak, A, **Kammerer, RA**, Fleming, A, Hijri, M, Frank, S and Farmer, EE (2004) Remorins form a novel family of coiled coil-forming oligomeric and filamentous proteins associated with apical, vascular and embryonic tissues in plants. Plant Mol Biol 55, 579-594.

46. Travis, MA, van der Flier, A, **Kammerer, RA**, Sonnenberg, A, Mould, AP and Humphries, MJ (2004) Interaction of filamin A with the integrin $\beta$7 cytoplasmic domain: role of alternative splicing and phosphorylation. FEBS Lett 569, 185-190.

45. Cho, C-H, **Kammerer, RA**, Lee, HJ, Yasunaga, K, Kim, K-T, Choi, H-H, Kim, W, Kim, SH, Park, SK, Lee, GM and Koh, GY (2004) A designed angiopoietin-1 variant, COMP-Ang1, protects against radiation-induced endothelial cell apoptosis. Proc Natl Acad Sci USA 101, 5553-5558.

44. Cho, C-H, **Kammerer, RA**, Lee, HJ, Steinmetz, MO, Ryu, YS, Lee, SH, Yasunaga, K, Shin, HS, Kim, I, Kim, K-T, Choi, H-H, Kim, W, Kim, SH, Park, SK, Lee, GM and Koh, GY (2004) COMP-Ang1: A designed angiopoietin-1 variant with non-leaky angiogenic activity. Proc Natl Acad Sci USA 101, 5547-5552.

43. **Kammerer, RA**, Kostrewa, D, Zurdo, J, Detken, A, García-Echeverría, C, Green, J, Müller, SA, Meier, BH, Winkler, FK, Dobson, CM and Steinmetz, MO (2004) Exploring amyloid formation by a de novo design. Proc Natl Acad Sci USA 101, 4435-4440.

42. Stetefeld, J, Alexandrescu, AT, Maciejewski, MW, Jenny, M, Rathgeb-Szabo, K, Schulthess, T, Landwehr, R, Frank, S, Rüegg, MA and **Kammerer, RA** (2004) Modulation of agrin function by alternative splicing and Ca2+ binding. Structure 12, 503-513.

**2003**

41. Alexandrescu, AT and **Kammerer, RA** (2003) Structure and disorder in the ribonuclease S-peptide tracked by NMR residual dipolar couplings. Protein Sci, 12, 2132-2140.

40. Stetefeld, J, Frank, S, Jenny, M, Schulthess, T, **Kammerer, RA**, Boudko, S, Landwehr, R and Engel, J (2003) Collagen stabilization at atomic level: Crystal structure of designed (GlyProPro)10-foldon. Structure 11, 339-346.

**2002**

39. Frank, S, Schulthess, T, Landwehr, R, Lustig, A, Mini, T, Jenö, P, Engel, J and **Kammerer, RA** (2002) Characterization of the matrilin coiled-coil domains reveals seven novel isoforms. J Biol Chem 277, 19071-19079.

38. Boudko, S, Frank, S, **Kammerer, RA**, Stetefeld, J, Schulthess, T, Landwehr, R, Lustig, A, Bächinger, HP and Engel, J (2002) Nucleation and propagation of the collagen triple helix in single-chain and trimerized peptides: transition from 3rd to 1st order kinetics. J Mol Biol 317, 459-470.

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**2001**

36. Alexandrescu, AT, Maciejewski, MW, Rüegg, MA, Engel, J and **Kammerer, RA** (2001) 1H, 13C and 15N backbone assignments for the C-terminal globular domain of agrin. J Biomol NMR 20, 295-296.

35. Stetefeld, J, Jenny, M, Schulthess, T, Landwehr, R, Schumacher, B, Frank, S, Rüegg, MA, Engel, J and **Kammerer, RA** (2001) The laminin-binding domain of agrin is structurally related to N-TIMP-1. Nature Struct Biol 8, 705-709.

34. Klopfenstein, DR, Klumperman, J, Lustig, A, **Kammerer, RA**, Oorschot, V and Hauri, H-P (2001) Subdomain-specific localization of CLIMP-63 (p63) in the endoplasmic reticulum is mediated by its luminal $\alpha$-helical segment. J Cell Biol 153, 1187-1299.

33. **Kammerer, RA**, Frank, S, Mechling, D, Schulthess, T, Landwehr, R, Bann, J, Guo, Y, Lustig, A, Bächinger, HP and Engel, J (2001) Stabilization of short collagen-like triple helices by protein engineering. J Mol Biol 308, 1081-1089.

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**2000**

31. Stetefeld, J, Jenny, M, Schulthess, T, Landwehr, R, Engel, J and **Kammerer, RA** (2000) Crystal structure of a naturally occurring parallel right-handed coiled-coil tetramer. Nature Struct Biol 7, 772-776.

30. Guo, Y, **Kammerer, RA** and Engel, J (2000) The unusually stable coiled-coil domain of COMP exhibits cold and heat denaturation in 4-6 M guanidinium chloride. Biophys Chem 85, 179-186.

29. Engel, J and **Kammerer, RA** (2000) What are oligomerization domains good for? Matrix Biol 19, 283-288.

28. **Kammerer, RA**, Frank, S, Hellstern, S, Pegoraro, S, Stetefeld, J, Lustig, A, Moroder, L and Engel, J (2000) Towards a high-resolution structure of phospholamban: design of soluble transmembrane domain mutants. Biochemistry 39, 6825-6831.

27. Frank, S, Lustig, A, Schulthess, T, Engel, J and **Kammerer, RA** (2000) A distinct seven-residue trigger sequence is indispensable for proper coiled-coil formation of the human macrophage scavenger receptor oligomerization domain. J Biol Chem 275, 11672-11677.

26. Burkhard, P, **Kammerer, RA**, Steinmetz, MO, Bourenkov, GP and Aebi, U (2000) The coiled-coil trigger site of the rod of cortexillin I unveils a distinct network of interhelical and intrahelical salt bridges. Structure Fold Des 8, 223-230.

25. Steinmetz, MO, **Kammerer, RA**, Jahnke, W, Goldie, KN, Lustig, A and van Oostrum, J (2000) Op18/Stathmin caps a kinked protofilament-like tubulin tetramer. EMBO J 19, 572-580.

**1999**

24. **Kammerer, RA**, Schulthess, T, Landwehr, R, Schumacher, B, Lustig, A, Yurchenco, PD, Ruegg, MA, Engel, J and Denzer, AJ (1999) Interaction of agrin with laminin requires a coiled-coil conformation of the agrin-binding site within the laminin $\gamma$1 chain. EMBO J 18, 6762-6770.

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20. Dames, SA, **Kammerer, RA**, Moskau, D, Engel, J and Alexandrescu, AT (1999) Contributions of the ionization states of acidic residues to the stability of the coiled coil domain of matrilin-1. FEBS Lett 446, 75-80.

**1998**

19. Blaess, S, **Kammerer, RA** and Hall H (1998) Structural analysis of the 6th immunoglobulin-like domain of mouse neural cell adhesion molecule L1 and its interactions with αvβ3, αIIbβ3 and α5β1 integrins. J Neurochem 71, 2615-2625.

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17. Burkhard, P, Steinmetz, MO, Schulthess, T, Landwehr, R, Aebi, U and **Kammerer, RA** (1998) Crystallization and preliminary X-ray diffraction analysis of the 190-Å-long coiled-coil dimerization domain of the actin-bundling protein cortexillin I from Dictyostelium discoideum. J Struct Biol 122, 293-296.

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15. Dames, SA, **Kammerer, RA**, Wiltscheck, R, Engel, J and Alexandrescu, AT (1998) NMR structure of a parallel homotrimeric coiled coil. Nature Struct Biol 5, 687-691.

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