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PHONE: +44-1223-267049**FAX:** +44-1223-268305**EMAIL:** radu@mrc-lmb.cam.ac.uk**HTTP:** <http://www2.mrc-lmb.cam.ac.uk/group-leaders/a-to-g/radu-aricescu>**SUMMARY**

I am an MRC Senior Research Fellow and Programme Leader at the MRC Laboratory of Molecular Biology, where I lead a research group employing structural, biochemical and electrophysiology methods to study cell surface proteins and complexes involved in neuronal synapse formation, function and remodelling. These are linked to important processes such as learning and memory, and their dysfunction leads to neurodegenerative and psychiatric diseases. I completed my undergraduate and MSc training in biology and molecular biology at the University of Bucharest, Romania, and received a PhD in neurobiology from the University College London. This was followed by postdoctoral training in structural biology at the University of Oxford, where I have also established my research laboratory in 2007, with support from an MRC Career Development Award.

EMPLOYMENT HISTORY

2017-	Programme Leader , MRC Laboratory for Molecular Biology, Cambridge, UK.
2016-2017	Professor of Molecular Neuroscience and MRC Senior Research Fellow , University of Oxford, Wellcome Trust Centre for Human Genetics (WTCHG), Division of Structural Biology.
2013-2016	MRC Senior Research Fellow (& Associate Professor) , University of Oxford, WTCHG, Division of Structural Biology.
2007-2012	MRC Career Development Award Fellow (& University Research Lecturer) , University of Oxford, WTCHG, Division of Structural Biology.
2001-2007	Postdoctoral Research Assistant , Cancer Research UK Receptor Structure Research Group, University of Oxford, WTCHG, Division of Structural Biology (PI: Prof. E. Yvonne Jones).

ACADEMIC TRAINING AND QUALIFICATIONS

1998-2001	Ph.D in Developmental Neurobiology . University College London, Institute of Child Health, Neural Development Unit. Supervisor: Dr. Andrew Stoker.
1997-1998	Visiting Research Student (Soros/FCO scholar). University of Oxford, Department of Human Anatomy and Corpus Christi College.
1996-1997	MSc in Molecular Biology , University of Bucharest, Romania.
1991-1996	BSc in Biological Sciences , University of Bucharest, Romania.

FELLOWSHIPS/SCHOLARSHIPS/AWARDS

2017-2020	Visiting Professor , University of Oxford.
2016-2017	Guest Professor , Keio University, Tokyo.
2016	Professor of Molecular Neuroscience, University of Oxford.
2015	Gary Price memorial lecture, British Pharmacological Society.
2014	Associate Professor , University of Oxford.
2013-2020	Medical Research Council Senior Research Fellowship .
2010	University Research Lecturer , University of Oxford.
2007-2012	Medical Research Council Career Development Award .
2001-2005	Junior Research Fellow , Wolfson College, Oxford.
1998-2001	UCL Graduate School Research Scholarship (full funding of PhD, together with the ORS award).
1998-2001	Overseas Research Student Award (from HEFCE).
1997-1998	Soros/FCO Chevening Scholarship , University of Oxford.
1991-1997	Merit Scholarship , University of Bucharest (undergraduate and MSc).

OTHER PROFESSIONAL ACTIVITIES

- Member of the Scientific Advisory Board of the Institute of Genetics and Development of Rennes (IGDR), France (2015-2018).
- Contributed to EU-funded programmes co-ordinated by the Division of Structural Biology (Instruct, P-Cube and Spine2), designed to develop technology in structural biology and supporting a significant infrastructure in the Division.
- Twice organized international workshops in Oxford, funded by the EU programmes Spine2 and P-Cube, respectively, focused on eukaryotic protein expression for structural biology.
- Frequently review manuscripts for international journals (was also on the editorial board of Molecular Pharmacology, stepped down in 2017) and grant applications for UK/EU funding bodies (MRC, BBSRC, WT, HFSP, ERC).
- I take active steps to disseminate our research results to a broader audience. Examples include interviews with Chemical and Engineering News (on behalf of the American Chemical Society), NeuroPod, a monthly podcast from the Nature journal, and contributions for the Wellcome Trust and Diamond Light Source blog teams.

GRANTS AWARDED

- G1.** "*Structural analysis of human GABA_A receptors*", BBSRC Project Grant (2015-2018, £ 818,660). I am the PI on this grant, which provides salaries for a post-doctoral research fellow and a research assistant in my group, as well as associated laboratory costs.
- G2.** "*The structural biology of synaptic connectivity: understanding the extracellular organizers of neurotransmission*", MRC Senior Research Fellowship (2013-2020, £2,929,128). I am the PI on this grant, which provides salaries for myself and two post-doctoral research fellows, as well as associated laboratory costs.
- G3.** "*Bridge over troubled synapses: synthetic extracellular protein scaffolds for neuronal connectivity*", HFSP Research Grant (2014-2017, 1,050,000 USD). I am a co-applicant on this grant, with Prof. Michisuke Yuzaki (PI, Keio University, Tokyo) and Alexander Dityatev (DZNE, Magdeburg). This grant provides the salary and consumables for a post-doctoral research fellow in my group.
- G4.** "*Structural analysis of Netrin 1 signal initiation and transduction*", MRC Project Grant (2014-2017, £785,617). I am a co-applicant on this grant (PI Christian Siebold, WTCHG, Oxford University). This grant provides the salary and consumables for a post-doctoral research fellow in my group.
- G5.** "*Structural Basis of Sigma-1 Receptor Ligand Interactions and Signalling*", MRC Project Grant (2013-2016, £786,985). I was a co-applicant on this grant (PI Jason Schnell, Department of Biochemistry, Oxford University). This grant provided the salary and consumables for a post-doctoral research fellow in my group.
- G6.** "*A novel diagnostic method for autoimmune disorders based on cell-derived vesicle microarrays*", MRC Confidence in Concept award (2013, £50,000). I was the PI on this grant, a collaboration with Angela Vincent and Paddy Waters (Nuffield Department of Clinical Neurosciences, Oxford University). This grant provided the salary and consumables for a post-doctoral research fellow in my group.
- G7.** "*Ion Channels and Diseases of Electrically Excitable Cells*" (2008-2016, £6,452,907 Principal applicant: Fran Ashcroft, on behalf of the OXION consortium, to which my laboratory belongs). This grant provides full salary and expenses for two DPhil students based in my laboratory.
- G8.** "*The Structural Biology of Memory*", MRC Career Development Award (2007-2012, £1,284,241). I was the PI on this grant, which provided full salaries for myself and a research assistant/DPhil student, as well as the bulk funding for my laboratory.
- G9.** "*Development of a high-affinity AMPA receptor modulator, targeting the N-terminal domain (NTD)*", MRC Technology Development Gap Fund grant (2011-2012, £106,380). I was a co-applicant on this grant (PI Ingo Greger, MRC Laboratory of Molecular Biology, Cambridge).
- G10.** "*Characterization of a novel binding site in the amino terminal domain of AMPA receptors*", MRC Technology Development Gap Fund grant (2009-2011, £147,056, joint application with R.A.J. McIlhinney, MRC Anatomical Neuropharmacology Unit, Oxford).

G11. "Efficient production of membrane proteins in mammalian cells for structural studies", Royal Society Research Equipment Grant (2009, £ 12,560). I was the PI on this grant.

PATENTS

- P1.** "Ligands for receptor-like protein tyrosine phosphatases" (2002, WO/2002/060471). Inventors: Stoker AW & Aricescu AR.
- P2.** "AMPA-type glutamate receptor" (2009, US patent application no. 61/180,916). Inventors: Aricescu AR, McIlhinney J, Clayton AJ & Siebold, C.
- P3.** "Molecular switch for neuronal outgrowth" (2012, WO/2012/112953). Inventors: Coles CH, Shen Y, Jones EY, Flanagan JG & Aricescu AR.
- P4.** "Crystalline GABAA receptor protein and pharmacologically active compounds" (filed Dec 2013). Inventors: Miller PS, Aricescu AR, Wynne G, Russell A.
- P5.** "Method of detecting the presence or absence of autoantibodies" (2014, WO/2014/202978). Inventors: Vincent A, Waters P, Aricescu AR.

PUBLICATIONS

Current total: 58. h-index: 35.

- 1) Elegheert J, Cvetkovska V, Clayton AJ, Heroven C, Vennekens KM, Smukowski SN, Regan MC, Jia W, Smith AC, Furukawa H, Savas JN, de Wit J, Begbie J, Craig AM, **Aricescu AR**. (2017) Structural Mechanism for Modulation of Synaptic Neuroligin-Neurexin Signaling by MDGA Proteins. *Neuron* 96:242-244.
- 2) Farhy-Tselnicker I, van Casteren ACM, Lee A, Chang VT, **Aricescu AR**, Allen NJ. (2017) Astrocyte-Secreted Glypican 4 Regulates Release of Neuronal Pentraxin 1 from Axons to Induce Functional Synapse Formation. *Neuron* 96:428-445.
- 3) Miller PS, Scott S, Masiulis S, De Colibus L, Pardon E, Steyaert J, **Aricescu AR**. (2017) Structural basis for GABA_A receptor potentiation by neurosteroids. *Nat. Struct. Mol. Biol.*, Advanced online publication. doi: 10.1038/nsmb.3484.
- 4) Yuzaki M, **Aricescu AR**. (2017) A GluD Coming-Of-Age Story. *Trends Neurosci.* 40:138-150.
- 5) Altemose N, Noor N, Bitoun E, Tumian A, Imbeault M, Chapman JR, **Aricescu AR**, Myers SR. (2017) A map of human PRDM9 binding provides evidence for novel behaviors of PRDM9 and other zinc-finger proteins in meiosis. *Elife* 6:e28383.
- 6) Nolan R, Alvarez LAJ, Elegheert J, Iliopoulou M, Jakobsdottir GM, Rodriguez-Muñoz M, **Aricescu AR**, Padilla-Parra S. (2017) nandb-number and brightness in R with a novel automatic detrending algorithm. *Bioinformatics*. Advanced online publication. doi:10.1093/bioinformatics/btx434.
- 7) Davies B, Brown LA, Cais O, Watson J, Clayton AJ, Chang VT, Biggs D, Preece C, Hernandez-Pliego P, Krohn J, Bhomra A, Twigg SRF, Rimmer A, Kanapin A; WGS500 Consortium, Sen A, Zaiwalla Z, McVean G, Foster R, Donnelly P, Taylor JC, Blair E, Nutt D, **Aricescu AR**, Greger IH, Peirson SN, Flint J, Martin HC. (2017) A point mutation in the ion conduction pore of AMPA receptor GRIA3 causes dramatically perturbed sleep patterns as well as intellectual disability. *Hum Mol Genet.* 26:3869-3882.
- 8) Elegheert J, Kakegawa W, Clay JE, Shanks NF, Behiels E, Matsuda K, Kohda K, Miura E, Rossmann M, Mitakidis N, Motohashi J, Chang VT, Siebold C, Greger I, Nakagawa T, Yuzaki M., **Aricescu AR** (2016) Structural Basis for Integration of GluD Receptors within Synaptic Organizer Complexes. *Science* 353:295-299.
- 9) Matsuda K, Budisantoso T, Mitakidis N, Sugaya Y, Miura E, Kakegawa W, Yamasaki M, Konno K, Uchigashima M, Abe M, Watanabe I, Kano M, Watanabe M, Sakimura K, **Aricescu AR**, Yuzaki M. (2016) Trans-Synaptic Modulation of Kainate Receptor Functions by C1q-like Proteins. *Neuron* 90:752-767.
- 10) Chang VT, Fernandes RA, Ganzinger KA, Lee SF, Siebold C, McColl J, Jönsson P, Palayret M, Harlos K, Coles CH, Jones EY, Lui Y, Huang E, Gilbert RJ, Klenerman D, **Aricescu AR**, Davis SJ. (2016) Initiation of T cell signaling by CD45 segregation at 'close contacts'. *Nat Immunol.* 17:574-582.

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- 11) Gallimore AR, **Aricescu AR**, Yuzaki M, Calinescu R. (2016) A Computational Model for the AMPA Receptor Phosphorylation Master Switch Regulating Cerebellar Long-Term Depression. *PLoS Comput Biol.* 12:e1004664.
- 12) Doody KM, Stanford SM, Sacchetti C, Svensson MN, Coles CH, Mitakidis N, Kiosses WB, Bartok B, Fos C, Cory E, Sah RL, Liu-Bryan R, Boyle DL, Arnett HA, Mustelin T, Corr M, Esko JD, Tremblay ML, Firestein GS, **Aricescu AR**, Bottini N. (2015) Targeting phosphatase-dependent proteoglycan switch for rheumatoid arthritis therapy. *Sci Transl Med.* 7:288ra76.
- 13) Taylor JC *et al.* (large list of authors). (2015) Factors influencing success of clinical genome sequencing across a broad spectrum of disorders. *Nat Genet.* 47:717-726.
- 14) Kakegawa W, Mitakidis N, Miura E, Abe M, Matsuda K, Takeo YH, Kohda K, Motohashi J, Takahashi A, Nagao S, Muramatsu S, Watanabe M, Sakimura K, **Aricescu AR**, Yuzaki M. (2015) Anterograde C1ql1 signaling is required in order to determine and maintain a single-winner climbing fiber in the mouse cerebellum. *Neuron* 85:316-329.
- 15) Seiradake E, Zhao Y, Lu W, **Aricescu AR**, Jones EY. (2015) Production of cell surface and secreted glycoproteins in mammalian cells. *Methods Mol Biol.* 1261:115-127.
- 16) Coles CH, Jones EY, **Aricescu AR**. (2015) Extracellular regulation of type IIa receptor protein tyrosine phosphatases: mechanistic insights from structural analyses. *Semin. Cell. Dev. Biol.* 37:98-107.
- 17) Miller PS, **Aricescu AR**. (2014) Crystal structure of a human GABA_A receptor. *Nature* 512: 270-275.
- 18) Coles CH, Mitakidis N, Zhang P, Elegheert J, Lu W, Stoker AW, Nakagawa T, Craig AM, Jones EY, **Aricescu AR**. (2014) Structural basis for extracellular *cis* and *trans* RPTP σ signal competition in synaptogenesis. *Nat. Commun.* 5:5209.
- 19) Banci L, Barbieri L, Bertini I, Luchinat E, Secci E, Zhao Y, **Aricescu AR**. (2013) Atomic-resolution monitoring of protein maturation in live human cells by NMR. *Nat Chem. Biol.* 9:297-299.
- 20) Bell CH, Healey E, van Erp S, Bishop B, Tang C, Gilbert RJ, **Aricescu AR**, Pasterkamp RJ, Siebold C. (2013) Structure of the Repulsive Guidance Molecule (RGM)-Neogenin signalling hub. *Science* 341:77-80.
- 21) **Aricescu AR** and Owens RJ. (2013) Expression of recombinant glycoproteins in mammalian cells: towards an integrative approach to structural biology. *Curr. Opin. Struct. Biol.* 23:345-356.
- 22) Seiradake E, Schaupp A, del Toro Ruiz D, Kaufmann R, Mitakidis N, Harlos K, **Aricescu AR**, Klein R, Jones EY. (2013) Structurally encoded intraclass differences in EphA clusters drive distinct cell responses. *Nat. Struct. Mol. Biol.* 20:958-964.
- 23) Bowden TA, Baruah K, Coles CH, Harvey DJ, Yu X, Song BD, Stuart DI, **Aricescu AR**, Scanlan CN, Jones EY, Crispin M. (2012) Chemical and Structural Analysis of an Antibody Folding Intermediate Trapped during Glycan Biosynthesis. *J. Am. Chem. Soc.* 134:17554-17563.
- 24) Coles CH, Shen Y, Tenney AP, Siebold C, Sutton GC, Lu W, Gallagher JT, Jones EY, Flanagan JG, **Aricescu AR**. (2011). Proteoglycan-specific molecular switch for RPTP σ clustering and neuronal extension. *Science* 332: 484-488.
- 25) Seiradake E, Coles CH, Perestenko PV, Harlos K, McIlhinney RAJ, **Aricescu AR**, Jones EY. (2011). Structural basis for cell surface patterning through NetrinG–NGL interactions. *EMBO J.* 30:4479-4488.
- 26) Zhao Y, Bishop B, Clay JE, Lu W, Jones M, Daenke S, Siebold C, Stuart DI, Jones EY, **Aricescu AR**. (2011). Automation of large-scale transient protein expression in mammalian cells. *J. Struct. Biol.* 175: 209-215.

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- 27) Chen S, Bubeck D, MacDonald BT, Liang WX, Mao JH, Malinauskas T, Llorca O, **Aricescu AR**, Siebold C, He X, Jones EY. Structural and Functional Studies of LRP6 Ectodomain Reveal a Platform for Wnt Signaling. (2011) *Dev. Cell.* 21:848-861.
- 28) Bell CH, **Aricescu AR**, Jones EY, Siebold C. (2011). A Dual Binding Mode for RhoGTPases in Plexin Signalling. *PLOS Biol.* 9: e1001134.
- 29) Malinauskas T, **Aricescu AR**, Lu W, Siebold C, Jones EY. (2011). Modular mechanism of Wnt signalling inhibition by Wnt inhibitory factor 1. *Nat. Struct. Mol. Biol.* 18: 886-893.
- 30) Seiradake E, Harlos K, Sutton G, **Aricescu AR**, Jones EY. (2010). An extracellular steric seeding mechanism for Eph-ephrin signaling platform assembly. *Nat. Struct. Mol. Biol.* 17: 398-402.
- 31) Clayton A, Siebold C, Gilbert RJ, Sutton GC, Harlos K, McIlhinney RAJ, Jones EY, **Aricescu AR**. (2009). Crystal structure of the GluR2 amino-terminal domain provides insights into the architecture and assembly of ionotropic glutamate receptors. *J. Mol. Biol.* 392:1125-1132.
- 32) Bowden T, **Aricescu AR**, Nettleship JE, Siebold C, Rahman-Huq N, Owens RJ, Stuart DI, Jones EY. (2009). Structural plasticity of Eph-receptor A4 facilitates cross-class ephrin signalling. *Structure* 17: 1386-1397.
- 33) Bishop B, **Aricescu AR**, Harlos K, O'Callaghan CA, Jones EY, Siebold C. (2009). Structural insights into hedgehog ligand sequestration by the human hedgehog-interacting protein HIP. *Nat. Struct. Mol. Biol.* 16: 698-703.
- 34) Staunton D, Millard CJ, **Aricescu AR**, Campbell ID. (2009) Preparation of recombinant fibronectin fragments for functional and structural studies. *Methods Mol. Biol.* 522: 73-99.
- 35) Crispin M, Bowden TA, Coles CH, Harlos K, **Aricescu AR**, Harvey DJ, Stuart DI, Jones EY. (2009) Carbohydrate and domain architecture of an immature antibody glycoform exhibiting enhanced effector functions. *J. Mol. Biol.* **387**: 1061-1066.
- 36) Bowden TA, Crispin M, Harvey DJ, **Aricescu AR**, Grimes JM, Jones EY, Stuart DI. (2008) Crystal structure and carbohydrate analysis of Nipah virus attachment glycoprotein: a template for antiviral and vaccine design. *J. Virol.* **82**: 11628-11636.
- 37) Bowden TA, **Aricescu AR**, Gilbert RJ, Grimes JM, Jones EY, Stuart DI. (2008) Structural basis of Nipah and Hendra virus attachment to their cell-surface receptor ephrin-B2. *Nat. Struct. Mol. Biol.* 15: 567-572.
- 38) Maretto S, Müller PS, **Aricescu AR**, Cho KW, Bikoff EK, Robertson EJ. (2008) Ventral closure, headfold fusion and definitive endoderm migration defects in mouse embryos lacking the fibronectin leucine-rich transmembrane protein FLRT3. *Dev. Biol.* **318**: 184-193.
- 39) **Aricescu A.R.**, Siebold C., Jones E.Y. (2008). Receptor protein tyrosine phosphatase μ : measuring where to stick. *Biochem. Soc. Trans.* **36**: 167-172.
- 40) Tabernero L, **Aricescu AR**, Jones EY, Szedlacsek SE. (2008) Protein tyrosine phosphatases: structure-function relationships. *FEBS J.* 275: 867-882.
- 41) **Aricescu AR**, Jones EY. (2007) Immunoglobulin superfamily cell adhesion molecules: zippers and signals. *Curr. Opin. Cell Biol.* 19: 543-550.
- 42) **Aricescu AR**, Siebold C, Choudhuri K, Chang VT, Lu W, Davis SJ, van der Merwe PA, Jones EY. (2007). Structure of a tyrosine phosphatase adhesive interaction reveals a spacer-clamp mechanism. *Science* 317: 1217-1220.
- 43) Crispin M, **Aricescu AR**, Chang VT, Jones EY, Stuart DI, Dwek RA, Davis SJ, Harvey DJ. (2007) Disruption of alpha-mannosidase processing induces non-canonical hybrid-type glycosylation. *FEBS Lett.* 581: 1963-1968.
- 44) Chang VT, Crispin M, **Aricescu AR**, Harvey DJ, Nettleship JE, Fennelly JA, Yu C, Boles KS, Evans EJ, Stuart DI, Dwek RA, Jones EY, Owens RJ, Davis SJ. (2007) Glycoprotein structural genomics: solving the glycosylation problem. *Structure* 15: 267-273.

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- 45) Nettleship JE, Aplin R, **Aricescu AR**, Evans EJ, Davis SJ, Crispin M, Owens R J. (2007) Analysis of variable N-glycosylation site occupancy in glycoproteins by liquid chromatography electrospray ionization mass spectrometry. *Anal. Biochem.* 361: 149-151.
- 46) **Aricescu AR**, Lu W, Jones EY. (2006) 'A time and cost efficient system for high level protein production in mammalian cells.' *Acta Crystallogr. D* 62: 1243-1250.
- 47) **Aricescu AR**, Assenberg R, Bill RM, Busso D, Chang VT, Davis SJ, Dubrovsky A, Gustafsson L, Hedfalk K, Heinemann U, Jones IM, Ksiazek D, Lang C, Maskos K, Messerschmidt A, Macieira S, Peleg Y, Perrakis A, Poterszman A, Schneider G, Sixma TK, Sussman JL, Sutton G, Tarboureich N, Zeev-Ben-Mordehai T, Jones EY (2006) Eukaryotic Expression: Developments for Structural Proteomics. *Acta Crystallogr. D* 62: 1114-1124.
- 48) Meier C, **Aricescu AR**, Assenberg R, Aplin RT, Gilbert RJC, Grimes JM, Stuart DI. (2006) The Crystal Structure of ORF-9b, a Lipid Binding Protein from the SARS Coronavirus. *Structure* 14: 1157-1165.
- 49) Crispin M, Harvey DJ, Chang VT, Yu C, **Aricescu AR**, Jones EY, Davis SJ, Dwek RA, Rudd PM. (2006) Inhibition of hybrid and complex-type glycosylation reveals the presence of the GlcNAc transferase I-independent fucosylation pathway. *Glycobiology* 16: 748-756.
- 50) **Aricescu AR**, Hon WC, Siebold C, Lu W, van der Merwe PA, Jones EY. (2006) Molecular analysis of receptor protein tyrosine phosphatase μ mediated cell adhesion. *EMBO J.* 25: 701-712.
- 51) Sajnani G, **Aricescu AR**, Jones EY, Gallagher J, Alete D, Stoker AW. (2005) RPTP σ promotes retinal neurite outgrowth non cell-autonomously. *J. Neurobiol.* 65: 59-71.
- 52) Sajnani-Perez G, Chilton JK, **Aricescu AR**, Haj F, Stoker AW. (2003) Isoform-specific binding of the phosphatase PTP σ to a ligand in developing muscle. *Mol. Cell. Neurosci.* 22: 37-48.
- 53) Brown J, Walter TS, Carter L, Abrescia NGA, **Aricescu AR**, Batuwangala TD, Bird LE, Brown N, Chamberlain P, Davis SJ, Dubinina E, Endicott J, Fennelly JA, Gilbert RJC, Harkiolaki M, Hon WC, Kimberley F, Love CA, Mancini EJ, Manso-Sancho R, Nichols CE, Robinson RA, Sutton GC, Schueller N, Sleeman MC, Stewart-Jones G, Vuong M, Welburn J, Zhang Z, Stammers DK, Owens RJ, Jones EY, Harlos K, Stuart DI. (2003) A procedure for setting up high-throughput, nanolitre crystallisation experiments. *J. Appl. Crystallogr.* 36: 315-318.
- 54) Rashid-Doubell F, McKinnell I, **Aricescu AR**, Sajnani G, Stoker AW. (2002) Chick RPTP σ regulates the targeting of retinal axons within the optic tectum. *J. Neurosci.* 22: 5024-5033.
- 55) **Aricescu AR**, McKinnell I, Halfter W, Stoker AW. (2002) Heparan sulphate proteoglycans are ligands for the receptor protein tyrosine phosphatase RPTP σ . *Mol. Cell. Biol.* 22: 1881-1892.
- 56) Szedlacsek SE, **Aricescu AR**, Fulga TA, Renault L, Scheidig AJ. (2001) Crystal structure of PTP-SL/PTP-BR7 catalytic domain: Implications for MAP Kinase regulation. *J. Mol. Biol.* 311: 557-568.
- 57) **Aricescu AR**, Fulga TA, Cismasiu VB, Goody RS, Szedlacsek SE. (2001) Intramolecular interactions in protein tyrosine phosphatase RPTP μ . Kinetic evidence. *Biochem. Biophys. Res. Commun.* 280: 319-327.
- 58) Szedlacsek SE, **Aricescu AR**, Havsteen BH. (1996) Time-dependent control of metabolic systems by external effectors. *J. Theor. Biol.* 182: 341-350.