

## Andrew Plested

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### Curriculum vitae

Since 2017	Professor (W3) of Cellular Biophysics, Humboldt-Universität zu Berlin
2015	Visiting Scholar, Interdisciplinary Institute for NeuroScience, University of Bordeaux, FR
2008 – 2017	Junior research group leader, FMP, Berlin
2005 – 2008	Postdoctoral fellow, Neurophysiology and Biophysics, National Institutes of Health (NIH), US
2002 – 2005	Postdoctoral fellow, Department of Pharmacology, University College London, UK
1998 – 2002	PhD thesis, Biophysics Group, Imperial College London, UK
1994 – 1998	MSc degree in Physics, Imperial College London, UK

### Research fields

Our group is active in the field of molecular neuroscience and biophysics with the following major areas:

- Structure and biophysics of activation mechanisms of glutamate receptors
- Photocontrol of receptors and enzymes in mammalian cells
- Optical reporters of signaling and activity
- Single channel recording and analysis of neurotransmitter receptors

### Activities in the scientific community, honors, awards

2018	Gary Price Memorial Lecture, British Pharmacological Society
2018	Chair, Membrane Biophysics, Biophysical Society
2017	Heisenberg Professorship, German Research Foundation (DFG)
2016	Senior Research Fellowship, Wellcome Trust, UK (declined)
2015	ERC Consolidator Grant, European Research Council
2015	IdEx Visiting Scholar and LabEx Brain sabbatical stay fellowship, Bordeaux, FR
Since 2014	Member, editorial board, Biophysical Journal
2008	Career Development Fellowship, Wellcome Trust, UK (declined)
2008	Career Development Award, Medical Research Council (MRC), UK (declined)

## Selected publications

- Poulsen MH, Poshtiban A, Klippenstein V, Ghisi V, Plested AJR. Gating modules of the AMPA receptor pore domain revealed by unnatural amino acid mutagenesis. *Proc. Natl. Acad. Sci. U. S. A.* 2019; 116: 13358-13367
- Baranovic J, Plested AJ. Auxiliary subunits keep AMPA receptors compact during activation and desensitization. *Elife* 2018; 7: e40548
- Yu A, Salazar H, Plested AJR\*, Lau AY\*. Neurotransmitter Funneling Optimizes Glutamate Receptor Kinetics. *Neuron* 2018; 97:139-149 | \*corresponding authors
- Riva I, Eibl C, Volkmer R, Carbone AL\*, Plested AJ\*. Control of AMPA receptor activity by the extracellular loops of auxiliary proteins. *Elife* 2017; 6: e28680 | \*corresponding authors
- Salazar H, Eibl C, Chebli M, Plested A. Mechanism of partial agonism in AMPA-type glutamate receptors. *Nat Commun* 2017; 8:14327
- Zachariassen LG, Katchan L, Jensen AG, Pickering DS, Plested AJ\*, Kristensen AS\*. Structural rearrangement of the intracellular domains during AMPA receptor activation. *Proc Natl Acad Sci USA* 2016; 113:E3950-3959 | \*corresponding authors
- Carbone AL, Plested AJ. Superactivation of AMPA receptors by auxiliary proteins. *Nat Commun* 2016; 7:10178
- Klippenstein V, Ghisi V, Wietstruk M, Plested AJ. Photoinactivation of glutamate receptors by genetically encoded unnatural amino acids. *J Neurosci* 2014; 34:980-991
- Lau AY, Salazar H, Blachowicz L, Ghisi V, Plested AJ\*, Roux B\*. A conformational intermediate in glutamate receptor activation. *Neuron* 2013; 79:492-50 | \*corresponding authors
- Carbone AL, Plested AJ. Coupled control of desensitization and gating by the ligand binding domain of glutamate receptors. *Neuron* 2012; 74:845-857