

## Erratum to: Distribution of dipeptide repeat proteins in cellular models and *C9orf72* mutation cases suggests link to transcriptional silencing

Martin H. Schludi<sup>1,2</sup> · Stephanie May<sup>1</sup> · Friedrich A. Grässer<sup>3</sup> · Kristin Rentzsch<sup>1</sup> · Elisabeth Kremmer<sup>1,2,4</sup> · Clemens Küpper<sup>1,2,5</sup> · Thomas Klopstock<sup>1,2,5</sup> · German Consortium for Frontotemporal Lobar Degeneration · Bavarian Brain Banking Alliance · Thomas Arzberger<sup>1,6,7</sup> · Dieter Edbauer<sup>1,2,8</sup>

© Springer-Verlag Berlin Heidelberg 2015

### Erratum to: Acta Neuropathol DOI 10.1007/s00401-015-1450-z

As a result of an error during digital processing of Figure 1a for publication, one of the immunofluorescence panels (GA<sub>175</sub>-GFP Nucleolin staining) was accidentally strongly altered in contrast and brightness. The corrected version of the figure is shown below. The authors apologize for any confusion caused by this error.

In the published article, the collaborators from the two institutions, German Consortium for Frontotemporal Lobar Degeneration and Bavarian Brain Banking Alliance, were incorrectly listed in article note. These names have been relocated to the [Appendix](#) section in the article now.

Figure 1a and the collaborators list have been amended in the published article.

### Appendix

Clinical contributions came from members of the German Consortium for Frontotemporal Lobar Degeneration: Adrian Danek, Janine Diehl-Schmid, Klaus Fassbender, Hans Förstl, Johannes Kornhuber, Markus Otto.

Clinical contributions came from members of the Bavarian Brain Banking Alliance: Andres Ceballos-Baumann, Marianne Dieterich, Regina Feuerecker, Armin Giese, Hans Klünemann, Alexander Kurz, Johannes Levin, Stefan Lorenzl, Thomas Meyer, Georg Nübling, Sigrun Roeber.

---

The online version of the original article can be found under doi:[10.1007/s00401-015-1450-z](https://doi.org/10.1007/s00401-015-1450-z).

---

✉ Thomas Arzberger  
thomas.arzberger@med.uni-muenchen.de

✉ Dieter Edbauer  
dieter.edbauer@dzne.de

<sup>1</sup> German Center for Neurodegenerative Diseases (DZNE), Feodor-Lynen-Str. 17, 81337 Munich, Germany

<sup>2</sup> Munich Cluster of Systems Neurology (SyNergy), Munich, Germany

<sup>3</sup> Institute of Virology, Saarland University Medical School, 66421 Homburg, Germany

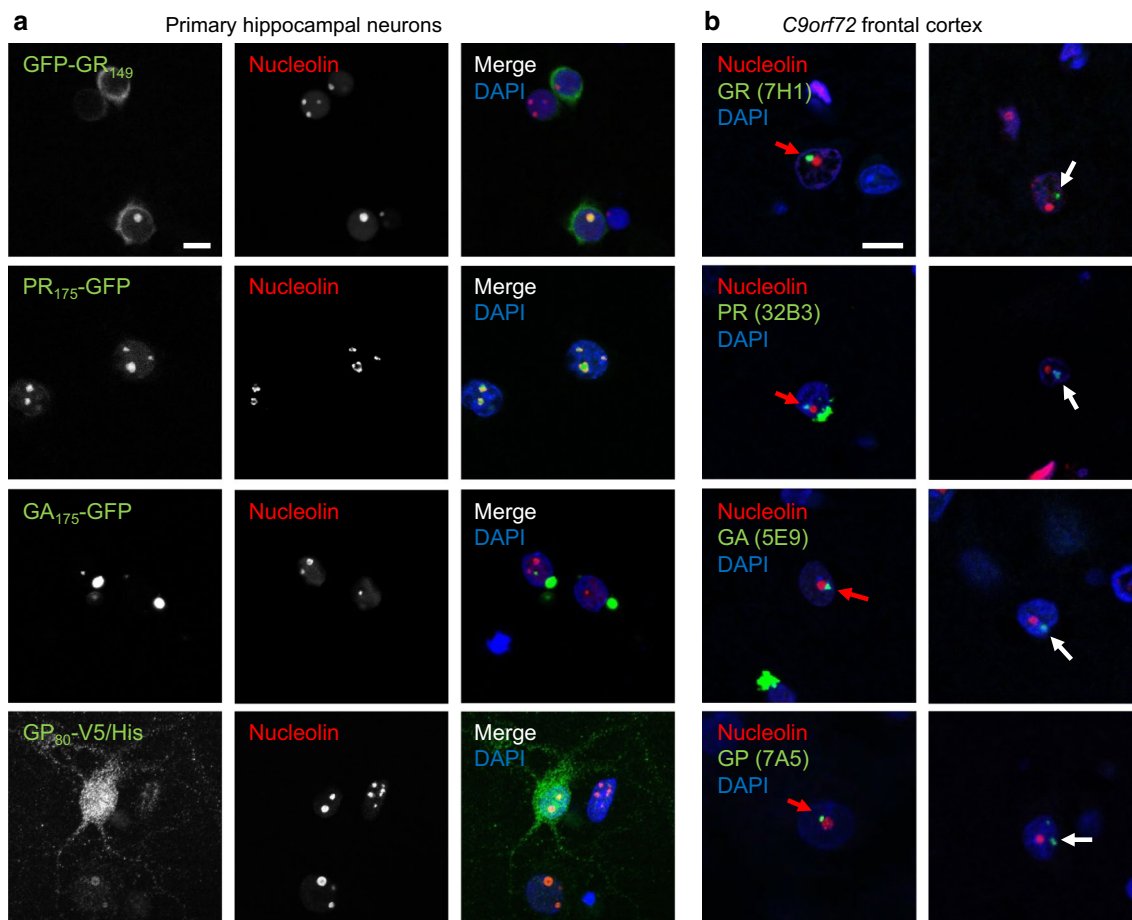
<sup>4</sup> Institute of Molecular Immunology, Helmholtz Zentrum München, German Research Center for Environmental Health (GmbH), Marchioninstr. 25, 81377 Munich, Germany

<sup>5</sup> Department of Neurology, Friedrich-Baur-Institute, Ludwig-Maximilians-University, 80336 Munich, Germany

<sup>6</sup> Center for Neuropathology and Prion Research, Ludwig-Maximilians-University Munich, Feodor-Lynen-Str. 23, 81377 Munich, Germany

<sup>7</sup> Department of Psychiatry and Psychotherapy, Ludwig-Maximilians University Munich, Nußbaumstraße 7, 80336 Munich, Germany

<sup>8</sup> Institute for Metabolic Biochemistry, Ludwig-Maximilians University Munich, 81377 Munich, Germany



**Fig. 1** Differential localization of intranuclear DPR inclusions in transduced primary neurons and in neurons of cases with *C9orf72* mutation. Double immunofluorescence for different DPR proteins (green) and nucleolin (red), a marker for the nucleolus, in primary neurons (**a**) and in frontal cortex of cases with *C9orf72* mutation (**b**). Nuclei are labeled with DAPI. Single confocal sections containing the nucleolus are shown. **a** Primary neurons transduced with lentivirus expressing either GFP-GR<sub>149</sub>, PR<sub>175</sub>-GFP, GA<sub>175</sub>-GFP or GP<sub>80</sub>-V5/His (DIV6 + 7). Note that poly-GR and poly-PR but not poly-

GA intranuclear inclusions are localized in the nucleolus. Poly-GA forms mainly compact cytoplasmic inclusions. Poly-GP expression is mainly pan-nuclear and also cytosolic. **b** In cortical areas of cases with *C9orf72* mutation neuronal intranuclear poly-GA, poly-GR and poly-GP inclusions are mostly localized adjacent to the nucleolus (red arrows) or less frequently randomly distributed (white arrows). No colocalization of DPR proteins with the nucleolus is observed. Scale bars represent 10 μm