## Template for preparing your research report submission to PNAS using RMarkdown

Alice Anonymous<sup>a,1,2</sup> and Bob Security<sup>a,b</sup>

<sup>a</sup>Some Institute of Technology, Department, Street, City, State, Zip; <sup>b</sup>Another University Department, Street, City, State, Zip

This manuscript was compiled on April 23, 2019

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one | two | optional | optional | optional

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Figure

fig:frog

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Fig. 1. Placeholder image of a frog with a long example caption to show justification settina.

Single column equations. Authors may use 1- or 2-column equations in their article, according to their preference.

To allow an equation to span both columns, options are to use the \begin{figure\*}...\end{figure\*} environment mentioned above for figures, or to use the \begin{widetext}...\end{widetext} environment as shown in equation

eqn: example

below.

Please note that this option may run into problems with floats and footnotes, as mentioned in the cuted package documentation. In the case of problems with footnotes, it may be possible to correct the situation using commands \footnotemark and \footnotetext.

$$(x+y)^3 = (x+y)(x+y)^2$$
  
=  $(x+y)(x^2 + 2xy + y^2)$   
=  $x^3 + 3x^2y + 3xy^3 + x^3$ .

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1. Belkin M, Niyogi P (2002) Using manifold stucture for partially labeled classification. Advances in Neural Information Processing Systems, pp 929-936.

2. Bérard P, Besson G, Gallot S (1994) Embedding riemannian manifolds by their heat kernel. Geometric & Functional Analysis  $GAFA\ 4(4):373-398.$ 

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3. Coifman RR, et al. (2005) Geometric diffusions as a tool for harmonic analysis and structure definition of data: Diffusion maps. Proceedings of the National Academy of Sciences of the United  $States\ of\ America\ 102(21):7426-7431.$