

RESPECTIVE CONTRIBUTIONS

The original Riboglow probes were developed primarily in the Palmer lab with the aid of several collaborators including Roy Parker, Ralph Jimenez, Dorota Gryko, and Robert Batey. A majority of the lab work was conducted by postdoc Esther Braselmann.

In my initial interviews with Professor Palmer, she mentioned that I could have the opportunity to work in RNA imaging tool development in her lab (among other projects), and suggested areas in which the initial Riboglow methodology could be improved. The aims stated herein were conceived of by me, the applicant, after review of the literature and identification of the limitations present in the field of RNA imaging. Professor Palmer provided input with respect to the feasibility of the aims, and suggested additional assays for verification of the tool.

I wrote the research proposal and designed all figures. I am submitting the proposal with the approval of Professors Palmer, Gryko, Batey, and Rinn (see letters of support).