#### **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.** 

NAME: Jimin Lee

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Graduate student

#### **EDUCATION/TRAINING**

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Korea University	BS	03/2020	Biology

### A. Personal Statement

I am currently studying the fundamental mechanism of transcription by determining atomic structures of RNA polymerases in various context by using electron-microscopy. In particular, I am interested in the transcriptional pausing in the context of riboswitches. In this study, I am going to reconstitute preQ1-I riboswitch containing RNA polymerase elongation complex and solve the cryo-EM structure(s) of the complexes at its paused state. The determined structures will reveal how the ligand, preQ1, manipulate the structure of the riboswitch, and subsequently, the conformation of RNAP.

## **B.** Positions and Honors

None

## C. Contributions to Science

None

# D. Additional Information: Research Support and/or Scholastic Performance Ongoing

Jin Young Kang (PI) 06/01/2019-06/18/2021

Basic Science Research Program, National Research Foundation of Korea(NRF)

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Goal: To understand the molecular mechanism of que pausing in preQ1-I riboswitch associated RNA

polymerase elongation complex

Role: Investigator