

# PREDICTING IN VIVO RNA SECONDARY STRUCTURE

by

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# **Abstract**

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# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	RNA secondary structure . . . . .	1
1.2	High throughput probing of RNS secondary structure . . . . .	1
1.3	Deep neural network . . . . .	1
<b>2</b>	<b>Yeast Model</b>	<b>2</b>
<b>3</b>	<b>Mouse Model</b>	<b>3</b>
<b>4</b>	<b>Human Model</b>	<b>4</b>
<b>5</b>	<b>Conclusion and future work</b>	<b>5</b>
	<b>Bibliography</b>	<b>5</b>

# Chapter 1

## Introduction

### 1.1 RNA secondary structure

### 1.2 High throughput probing of RNS secondary structure

K562 and yeast DMS data[1]

Mouse embryonic stem cell v6.5 icSHAPE data[2]

Yeast ModSeq validation data[4]

Hek293 and mouse validation data (different compartments)[3]

### 1.3 Deep neural network

## Chapter 2

# Yeast Model

## Chapter 3

# Mouse Model

## Chapter 4

# Human Model

## Chapter 5

# Conclusion and future work



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