UNIVERSITY OF CALIFORNIA SAN DIEGO

Transcriptomic Analysis of Human Neurodevelopment

A thesis submitted in partial satisfaction of the requirements
for the degree Master of Science

in

Biology

by

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Committee in charge:

Professor Lilia Iakoucheva, Chair
Professor Scott Rifkin, Co-Chair
Professor Barry Grant

2019

The thesis of Kevin Khai Chau is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

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_____
Co-Chair

_____
Chair

University of California San Diego

2019

DEDICATION

To two, the loneliest number since the number one.

EPIGRAPH

A careful quotation

conveys brilliance.

—Smarty Pants

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ACKNOWLEDGEMENTS

Thanks to whoever deserves credit for Blacks Beach, Porters Pub, and every coffee shop in San Diego.

Thanks also to hottubs.

VITA

2002	B. S. in Mathematics *cum laude*, University of Southern North Dakota, Hoople
2002-2007	Graduate Teaching Assistant, University of California, San Diego
2007	Ph. D. in Mathematics, University of California, San Diego

PUBLICATIONS

Your Name, "A Simple Proof Of The Riemann Hypothesis", *Annals of Math*, 314, 2007.

Your Name, Euclid, "There Are Lots Of Prime Numbers", *Journal of Primes*, 1, 300 B.C.

ABSTRACT OF THE DISSERTATION

Transcriptomic Analysis of Human Neurodevelopment

by

Kevin Khai Chau

Master of Science in Biology

University of California San Diego, 2019

Professor Lilia Iakoucheva, Chair
Professor Scott Rifkin, Co-Chair

This dissertation will be abstract.

Chapter 1

Transcriptomic Analysis of Human Neurodevelopment

1.1 Background

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Nulla odio sem, bibendum ut, aliquam ac, facilisis id, tellus. Nam posuere pede sit amet ipsum. Etiam dolor. In sodales eros quis pede. Quisque sed nulla et ligula vulputate lacinia. In venenatis, ligula id semper feugiat, ligula odio adipiscing libero, eget mollis nunc erat id orci. Nullam ante dolor, rutrum eget, vestibulum euismod, pulvinar at, nibh. In sapien. Quisque ut arcu. Suspendisse potenti. Cras consequat cursus nulla.

1.2 Results

1.3 Materials and Methods

1.4 Discussion

Chapter 2

Single-Cell RNA-Seq of Mouse Models

something

2.1 16p11.2

2.2 Cul3 Knockout Mice

Chapter 3

Just a Test

This is only a test.

3.1 A section

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Nulla odio sem, bibendum ut, aliquam ac, facilisis id, tellus. Nam posuere pede sit amet ipsum. Etiam dolor. In sodales eros quis pede. Quisque sed nulla et ligula vulputate lacinia. In venenatis, ligula id semper feugiat, ligula odio adipiscing libero, eget mollis nunc erat id orci. Nullam ante dolor, rutrum eget, vestibulum euismod, pulvinar at, nibh. In sapien. Quisque ut arcu. Suspendisse potenti. Cras consequat cursus nulla.

3.1.1 A Figure Example

This subsection shows a sample figure.

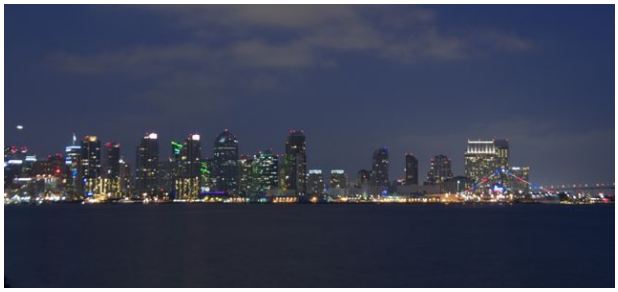

Figure 3.1: A picture of San Diego. Short figure caption must be < 4 lines in the list of figures and match the start of the main figure caption verbatim. Note that figures must be on their own line (no neighboring text) and captions must be single-spaced and appear *below* the figure. Captions can be as long as you want, but if they are longer than 4 lines in the list of figures, you must provide a short figure caption.

3.1.2 A Table Example

While in Section 3.1.1 Figure 3.1 we had a majestic figure, here we provide a crazy table example.

Table 3.1: A table of when I get hungry. Short table caption must be < 4 lines in the list of tables and match the start of the main table caption verbatim. Note that tables must be on their own line (no neighboring text) and captions must be single-spaced and appear *above* the table. Captions can be as long as you want, but if they are longer than 4 lines in the list of figures, you must provide a short figure caption.

Time of day	Hunger Level	Preferred Food
8am	high	IHOP (French Toast)
noon	medium	Croutons (Tomato Basil Soup & Granny Smith Chicken Salad)
5pm	high	Bombay Coast (Saag Paneer) or Hi Thai (Pad See Ew)
8pm	medium	Yogurt World (froyo!)

Appendix A

Final notes

What to do about things [Mar83]. What did he say [RI99]. Remove me in case of abdominal pain.

Bibliography

[Mar83] Robert D. Martin. *Human Brain Evolution in an Ecological Context*. American Museum of Natural History, 1983.

[RI99] James K. Rilling and Thomas R. Insel. The primate neocortex in comparative perspective using magnetic resonance imaging. *Journal of Human Evolution*, 37(2):191–223, 1999.