

A U S H A N G

FREIE UNIVERSITÄT BERLIN

Fachbereich Mathematik und Informatik

Promotionsbüro, Arnimallee 14, 14195 Berlin

D I S P U T A T I O N

Donnerstag, 5. September 2019, 10:00

Ort: R025/026

(Fachbereich Mathematik und Informatik, Arnimallee 6, 14195 Berlin)

Disputation über die Doktorarbeit von

Frau Maureen Rebecca Smith

Thema der Dissertation:

Methods to detect Evolutionary Constraints: Application to HIV

Thema der Disputation:

Functional and structural analysis of non-coding RNA

Die Arbeit wurde unter der Betreuung von **Dr. M. von Kleist** durchgeführt.

Abstract:

In addition to its coding capacity, RNA occupies a multitude of non-coding functions in virtually all biological processes, including gene regulation, enzymatic activity, and promotion of epigenetic modification. Moreover, ncRNAs may be involved in the progression of critical diseases such as cancer.

Until recently, proteins have been the main protagonists for drug discovery. In the last few years, however, increasing interest was put on RNA as a promising target for diagnostics and therapeutics. Yet, many biological functions and structural mechanisms involving RNA remain underexplored. Recent technologic advances allow us to expand our knowledge of RNA biology and to explore its role in many cellular processes.

In this talk, I present state of the art methods which utilize high-throughput sequencing technologies for the analysis of RNA structure and function.

Die Disputation besteht aus dem o. g. Vortrag, danach der Vorstellung der Dissertation einschließlich jeweils anschließenden Aussprachen.

Interessierte werden hiermit herzlich eingeladen

Der Vorsitzende der Promotionskommission

Prof. Dr. K. Reinert