

# Title of the report

Subtitle

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## Abstract

This is the abstract of the report. It can span multiple lines.

## Table of contents

1	Introduction	1
1.1	First subsection . . . . .	1
1.2	Second subsection . . . . .	2
2	Material and methods	2
3	Results	2
4	Discussion	2
	References	2

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## 1 Introduction

### 1.1 First subsection

The Basal Ganglia (BG) are a set of nuclei located in the basal forebrain, receiving inputs mostly from the cerebral cortex and projecting to various motor centers, as well as back to the cortex through the thalamus, forming a closed-loop. It is involved in major functions such as reinforcement learning, habit formation, planning and motor control, but also in diseases such as Parkinson's disease or Tourette syndrome.

References: (Vitay, 2017)

See Figure 1 and Section 3.

$$\tau \frac{dx_j(t)}{dt} + x_j(t) = \sum_i w_{ij}^{in} r_i^{in}(t) + g \sum_{i \neq j} w_{ij}^{rec} r_i(t)$$

**i** Nota Bene

Important information.

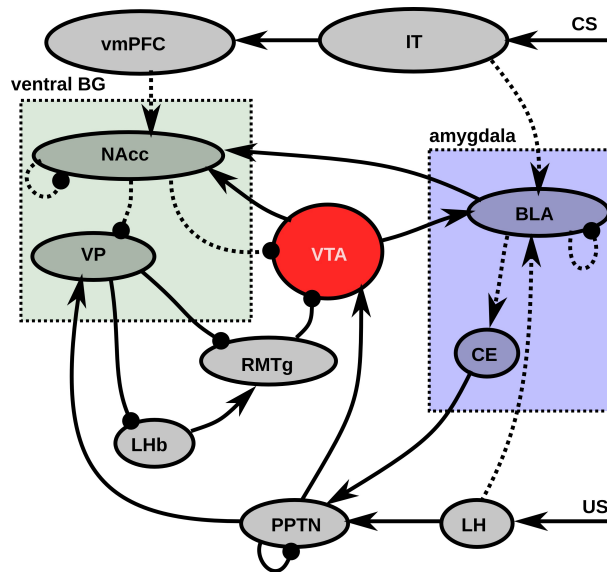


Figure 1: Afferent system to VTA. (Vitay, 2017)

```
for i in range(10):
    print(i)
```

## 1.2 Second subsection

[https://www.youtube.com/embed/tPgf\\_btTFIc](https://www.youtube.com/embed/tPgf_btTFIc)

## 2 Material and methods

## 3 Results

## 4 Discussion

## References

Vitay, J. (2017). On the role of dopamine in motivated behavior: A neuro-computational approach.  
Available at: <https://julien-vitay.net/publication/vitay2017/>.