



Metodi di Ensemble Gerarchici per la Predizione Strutturata della Funzione delle Proteine

Relatore

Prof. Giorgio Valentini

Correlatore

Dr. Marco Notaro

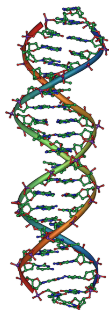
Candidato

Marco Odore

10 Luglio 2018

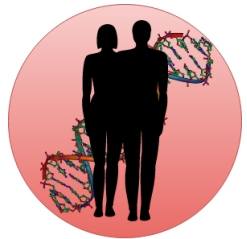
Central Dogma

- All'interno delle molecole di DNA di ogni essere vivente esistono diverse migliaia di geni.



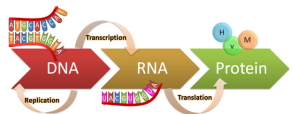
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- Si stima che per l'essere umano il DNA possenga tra i 20.000 - 25.000 geni.



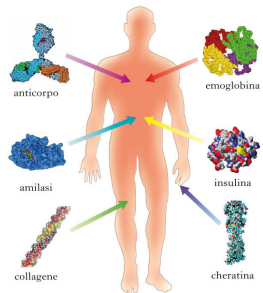
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- Tramite il processo di trascrizione, sintesi e processamento del DNA, un gene è capace di produrre più proteine.
- Ogni proteina è responsabile di una o più funzioni all'interno delle cellule degli esseri viventi.



Configuration

- The configuration of the standard theme is:
 - `language=italian`
 - `coding=utf8x`
 - `titlepagelogo=name-of-the-logo`
 - `bullet=circle`
 - `pageofpages=of`
 - `titleline=true`
 - `color=blue`
 - `secondcandidate=false`
 - `secondlogo=false`
- Most of them, actually everyone except the *titlepagelogo*, can be omitted if there are no modifications

Behavior of alerts

Each color theme requires different colors to highlight words. To insert alerts by using the *itemize* environment, you can exploit:

```
\begin{itemize}  
\item<+--| alert@+> Apple  
\item<+--| alert@+> Peach  
\end{itemize}
```

For example:

- Apple

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Another way to highlight words

If you want to highlight your text out of the environment *itemize*, Beamer2Thesis offers you the following possibilities:

- the standard command `\alert{text}`: it simply highlights your `text`
- the command `\highlight{text}`: it highlights your `text` setting it in italic
- the command `\highlightbf{text}`: it highlights your `text` setting it in bold

Of course, the color used, is set accordingly to your choice in the configuration phase.

Highlighting formulas

- The package `hf-tikz` allows to highlight formulas and formula parts in Beamer with overlay specifications
- The adaptation of colors to the theme could be done in this way:

```
\usepackage[beamer,customcolors]{hf-tikz}
\hfsetfillcolor{alerted text.fg!10}
\hfsetbordercolor{alerted text.fg}
```
- *Two compilation runs* are required to get the right result!
- Read the package documentation to find more options; an example will be provided in the next frame.

Highlighting formulas (II)

- Example:

$$x + y = 10$$

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- Code:

```
\[\tikzmarkin<2->{a}x+  
  \tikzmarkin<1>{b}y\tikzmarkend{b}  
=10\tikzmarkend{a}\]
```

The output

The pdf generated, has automatically, some properties:

- the title
- the name of the author
- the subject:
 - Thesis Presentation by using the english language
 - Presentazione Tesi di Laurea by using the italian language

This is possible thanks to the available options of hyperref. To create references in the text, use:

- `\label{name-reference}` in the starting point
- `\ref{name-reference}` in the point you want to show the reference
- `\href{url}{name-url}` to specify web addresses

Suggestions

- To realize a frame it is possible use the environment *frame* with top (t), center (c) or bottom (b) alignment: I suggest you to use the top alignment; this is the basic code:

```
\begin{frame}[t]{title-of-the-frame}  
text  
\end{frame}
```

- To make things easier, it has been introduced a new environment which is able to have the top property property intrinsic:

```
\begin{tframe}{title-of-the-frame}  
text  
\end{tframe}
```

Suggestions (II)

- To realize the titlepage with all options, it has been introduced the command `\titlepageframe`
 - Of course, it is also possible to use the *standard* approach

```
\begin{frame}[plain]
\titlepage
\end{frame}
```
 - In this case **do not** provide a title for the frame
- If you have to insert some code using *verbatim* or *listings* **do not exploit** *tframe* environment, but:

```
\begin{frame}[t,fragile]{title-of-the-frame}
\verb!code!
\end{frame}
```

Suggestions (III)

- If the title does not fit in the footer box, it is possible to exploit the so called *shorttitle*; an example:

```
\title[short title]{Long title of the thesis}
```

In this way the long title is just placed in the titlepage.

- In case there are more than two supervisors or assistantsupervisors, I suggest you to insert them through commands reported in ?? and separate names thanks to a comma.

On Facebook

The relevance of Facebook is known to everybody: due to this reason, you can find:

- the group [Beamer2Thesis](#)
- the page [Beamer2Thesis](#)

In this way you can post your comments, hints, suggestion and questions in more familiar way. Moreover, you can find further examples.

History

Here are shortly reported the main features of the releases:

- basic version (2011-01-17):
 - colors, second logo, second candidate, tframe environment, titleline, bullets, languages, separator string for slide numeration;
- release 2.0:
 - third logo, assistant supervisor, new ways to highlight, new command for the titlepage, new environments *adv* and *disadv*, $X_{\exists}T_{\exists}E_X$ and $X_{\exists}L_{\exists}T_{\exists}E_X$ support, blocks;
- release 2.1:
 - coding option, second supervisor, second assistantsupervisor;
- release 2.2:
 - language, short title, highlighting formulas.

Thanks

I would like to thank people that, with precious hints, help me:

- Alessio Califano
- Alessio Sanna
- Luca De Villa Palù
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- Giovanna Turvani
- Mattia Stefano
- Nicola Tuveri
- Giuliana Galati

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