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# **Simple strategy for facilitated protection and utilization of research results**

First symposium  
Toward translational research in brain and heart studies:  
Achievements and challenges in knowledge and  
technology transfer

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# Content

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## Patenting in biomedicine

- Invention and patent

- Patentable and non-patentable inventions in biomedicine

## IP in research project

- Preparing a project

- Defining relationship regarding IP rights

- Early spotting of invention

- Patent application and publication of research results

- Licensing, spin-off and other commercialization efforts



# Patenting in biomedicine

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*What is an invention?*

**THERE IS NO DEFINITION OF INVENTION!**

## DESCRIPTION

- Invention **differs** from discovery.
- Invention must be **new**, **inventive** and **industrially applicable**.
- Invention is the **solution of particular technical problem**, thus it **must be technical** by its nature.

**Only inventions are patentable.**

Discoveries, art-works, ideas, mathematical and business methods, computer programs and algorithms, databases etc. are not patentable.

To be patentable an invention **must be fully disclosed**.



# Patenting in biomedicine

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*What can be protected by patent?*

Patent shall be granted for the invention which concerns:

- a **product** consisting of or containing biological material;
- a **process** by means of which the biological material is produced, processed or used;
- a **biological material isolated from its natural environment** or produced by means of technical process, even if it previously occurred in nature.

An invention which concern plants or animals shall be consider patentable if:

- the technical feasibility of the invention is not confined to the particular plant or animal variety and
- if the process for carrying out the invention is not essentially biological (crossing or selection).

# Patenting in biomedicine

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## *What can't be protected by patent?*

- The **human body**, at the various stages of its formation and development, and the simple discovery of one of its elements, including the sequence or partial sequence of a gene.
- An invention relating to an element isolated from the human body or otherwise produced by means of a technical process, including the sequence or partial sequence of a gene, **may constitute a patentable invention**, even if the structure of that element is identical to that of a natural element. The **industrial application of a sequence or a partial sequence of a gene must be disclosed** in the patent application as originally filed.
- Inventions which concern **diagnostic or surgical methods or methods of treatment practiced** directly on the human or animal body, with the **exception of the products, in particular substances or compositions used in such methods**.





# Patenting in biomedicine

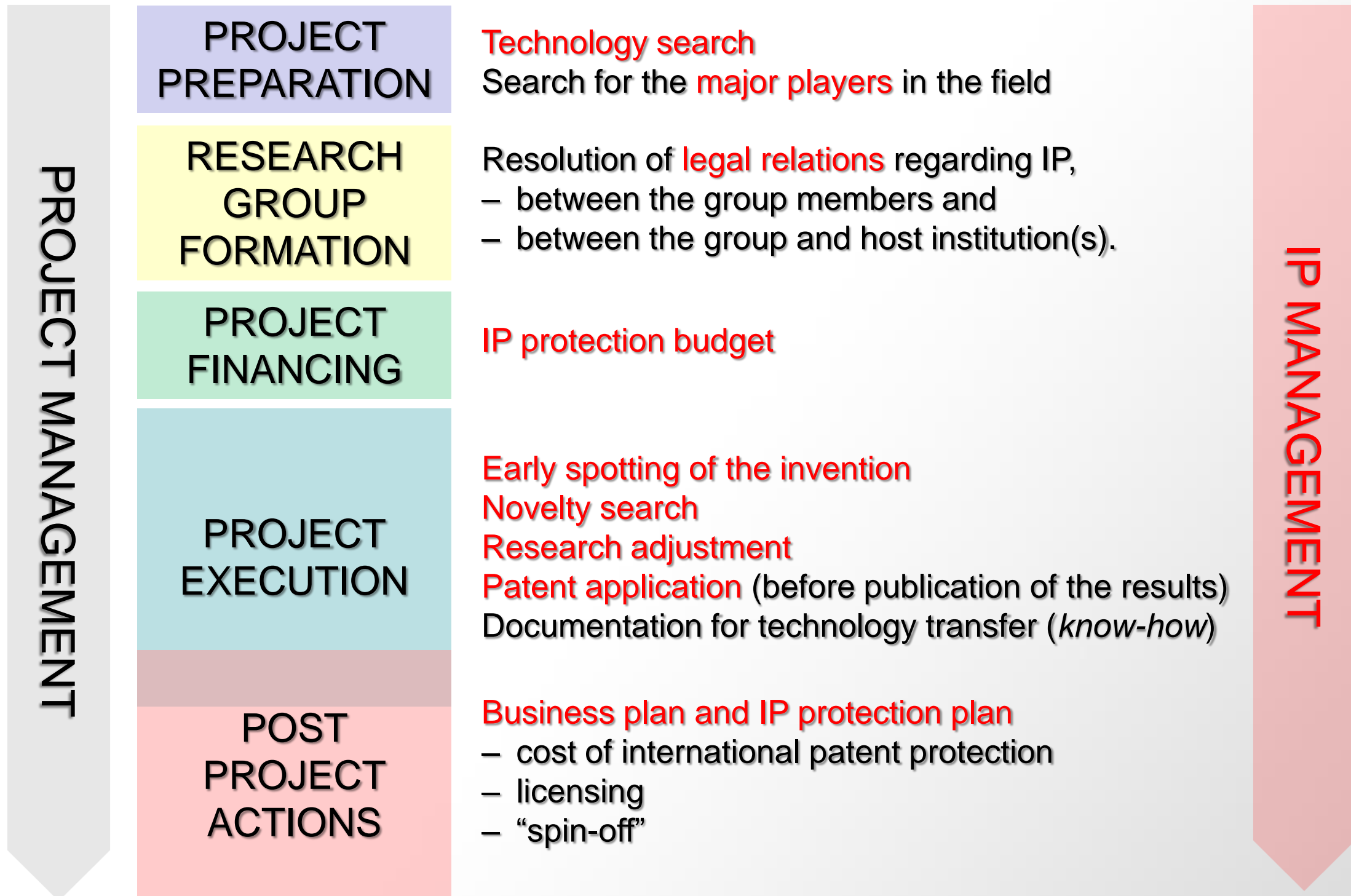
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## *What can't be protected by patent? (2)*

Inventions shall be considered unpatentable where their commercial exploitation would be contrary to public order or morality, in particular:

- for **cloning human beings**;
- processes for **modifying the germ line genetic identity of human beings**;
- **uses of human embryos** for industrial or commercial purposes; and
- processes for **modifying the genetic identity of animals** which are likely to cause them suffering without any substantial medical benefit to man or animal, and also animals resulting from such processes.

# Model for protection of research results



# Conclusion

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By managing of IP rights the following benefits can be obtained:

- better conditions for professional promotion of each inventor;
  - increase the chances for favourable licensing of the invention;
  - additional income for researchers;
  - direct financial effect from the research activities;
  - status of preferential research group for further projects;
  - improvement of the image of research institution in scientific community as well as in business sector;
- . . .



# **(Some) useful links**

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<http://www.dziv.hr>

[http://www.dziv.hr/priručnici/hr\\_guidelines/hr/hrpat.htm](http://www.dziv.hr/priručnici/hr_guidelines/hr/hrpat.htm)

<http://www.dziv.hr:8080/mkp/index.php>

[http://www.dziv.hr/webcontent/file\\_library/izvori\\_inf/pdf/patent/EU\\_patent.pdf](http://www.dziv.hr/webcontent/file_library/izvori_inf/pdf/patent/EU_patent.pdf)

<http://www.epo.org>

<http://www.wipo.int>

<http://www.uspto.gov>

<http://www.jpo.go.jp>

[http://www.sipo.gov.cn/sipo\\_English/zljs](http://www.sipo.gov.cn/sipo_English/zljs)

<http://ep.espacenet.com>

<http://www.wipo.int/pctdb/en/>

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# THANK YOU!

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