Rudjer Boskovic Institute

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RBI is the largest Croatian multidisciplinary research centre

- basic science
- applied science
- higher education

Research fields
- Physics
- Chemistry
- Oceanography (marine and environmental research and geosciences),
- Molecular Biology
- Biomedicine
- Computer science
- Electronics/Engineering
MISSION
High quality basic research
➢ strong involvement in higher education
➢ Leading contribution to the growth of the national economy

VISION
✓ Excellent scientific institution
✓ delivering knowledge and values to industry, government and academic institutions
INSTITUTE TODAY

20 000 m² area
82 laboratories
TOTAL = 867 EMPLOYEES

542 RESEARCH STAFF (344 WITH PhD) + 325 SUPPORT AND TECHNICAL STAFF

198 YOUNG RESEARCHERS
34 YOUNG RESEARCHERS WITH PhD
118 SENIOR RESEARCH ASSOCIATES
95 RESEARCH ASSOCIATES
97 SENIOR RESEARCHERS
Overview by branches

- Biomedicine: 15%
- Computing & engineering: 5%
- Chemistry: 30%
- Oceanology: 14%
- Biology: 16%
- Physics: 20%

Overview by age

- <35 years
- 35-45 years
- 46-55 years
- >56 years
### Scientific publications

RBI scientists - 6% of the total no. of scientists in Croatia

- 22% of all Croatian articles cited in Current Content
- 1998-2008 = 3771 (22% RH)
- No. of citations = 22,553
- Average citation number per paper = 5.98

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>original scientific articles</td>
<td>450</td>
</tr>
<tr>
<td></td>
<td>CC-papers</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td>patent applications</td>
<td>8</td>
</tr>
</tbody>
</table>
Research Projects

- **136 projects** in basic research funded by the Ministry of Science, Education and Sports Republic of Croatia

- **International projects:**

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>TOTAL NO.</th>
<th>FIELD OF RESEARCH</th>
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</thead>
<tbody>
<tr>
<td>FP5</td>
<td>2</td>
<td>experimental physics, marine research</td>
</tr>
<tr>
<td>FP6</td>
<td>20</td>
<td>experimental physics, marine research, molecular biology, chemistry, atomic research, molecular medicine</td>
</tr>
<tr>
<td>FP7</td>
<td>7</td>
<td>computer sciences, experimental physics,</td>
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<tr>
<td>NATO</td>
<td>4</td>
<td>experimental physics, marine research, chemistry</td>
</tr>
<tr>
<td>IAEA*</td>
<td>6</td>
<td>experimental physics</td>
</tr>
<tr>
<td>COST</td>
<td>5</td>
<td>molecular medicine</td>
</tr>
<tr>
<td>INTERREG***</td>
<td>2</td>
<td>marine research</td>
</tr>
</tbody>
</table>

- In 2008: 67 applied and technological projects and 4 HITRA*** projects
### COMMERCIAL CONTRACTS IN CRO 2004 – 2008

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CONTRACTED VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>3.082.763,46 kn</td>
</tr>
<tr>
<td>2005</td>
<td>3.727.441,70 kn</td>
</tr>
<tr>
<td>2006</td>
<td>5.266.894,31 kn</td>
</tr>
<tr>
<td>2007</td>
<td>8.917.551,69 kn</td>
</tr>
<tr>
<td>2008</td>
<td>7.114.677,60 kn</td>
</tr>
</tbody>
</table>

01/01/2009 - 15/05/2009 1.551.116,06 kn

### COMMERCIAL CONTRACTS - CROATIA - 2004-2008

[Graph showing the trend of contracted value from 2004 to 2008]
INTERNATIONAL COMMERCIAL CONTRACTS
2004 – 2008

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CONTRACTED VALUE COMMERCIAL CONTRACTS INTERN.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>EUR</td>
</tr>
<tr>
<td>2004</td>
<td>313,398,00</td>
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<tr>
<td>2005</td>
<td>180,721,20</td>
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<tr>
<td>2006</td>
<td>162,366,28</td>
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<tr>
<td>2007</td>
<td>359,279,54</td>
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<tr>
<td>2008</td>
<td>515,588,89</td>
</tr>
<tr>
<td>01/01-15/05/2009</td>
<td>11,224,00</td>
</tr>
</tbody>
</table>
Collaboration with universities

✓ 200 RBI scientists involved
✓ 78 undergraduate courses
✓ 245 graduate courses

PhD studies:

**Medicinal Chemistry** - Uni Rijeka & GlaxoSmithKline Research Centre ZG

- Molecular Biosciences - Uni Osijek, Split and Dubrovnik
- Environment and Ecology - Uni Osijek
- Tumour Biology - Unis Split, Dubrovnik and Zadar
- Biophysics - Uni Split
- Oceanology - Uni ZG, DU, ST
- Graduate studies on Project Management

*Distribution of the RBI held graduate courses among the universities (245)*
Intellectual Property and Commercialization

- RBI’s Agency founded in 2007
- specialized in commercialization of innovations and technology transfer
- links science and technology with economy and industry.

**Portfolio:** more than 80 innovations and scientific projects in various fields with commercial potential but primarily in chemistry, medicine, biology, physics and informatics

- 7 employees,
- more than 80 projects (32 outside RBI),
- 32 patent applications
- 7 license agreements, 1 patent granted and 5 spin-offs
THANK YOU!