Enhancing Excellency
- Lessons from Humboldt

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German Universities –
History

- Old University Tradition: 1348 Prague University
  1365 Heidelberg University

- 1810 Foundation of the “Mother of All
  Modern Universities” by Wilhelm von Humboldt

- Beginning of 20th Century: “Golden Age”,
  29 Nobel Prize Winners at Humboldt-Universität

- Today: Shanghai Ranking 2004
  Technical University Munich  45th
  Humboldt-Universität  95th
Historic Upheavals

- 1933: Nazi Regime
- 1949: De-Nazification
  Separation of East and West Germany
- 1990: Reunification

⇒ Exchange of Scientific Personnel
Challenges of the 21st Century

- Structural Challenges
- Personnel Problems
- Financial Strains
Structural Challenges

• Little Autonomy (Strong Financial and Legal Dependency on the State)

• Equal Treatment of all Universities (Equal Legal Frame, Equal Financial Support, Equal Wages)

• Mass Universities
  (up to 50,000 Students)

⇒ No Elite University
Personnel Problems

- Limited Rights to Select Professors
- Limited Rights to Select Students
- Poor Support of Junior Researchers
  ➔ Brain Drain
Under Financial Strain

- Low Public Funding for Tertiary Education (1% of GDP)
- Low Private Funding (8% of Universities’ Budgets)
- Little Financial Autonomy
- No Research Overhead
- No Tuition Fees
Recent Reforms

1. Financial and Structural Autonomy
2. Fostering Young Researchers
3. Networking
4. Establishment of a Comprehensive Quality Management System
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Fostering Young Researchers - Challenges

- Unstructured Doctoral Phase
- Dependency on Professors
- Little Independent Research and Responsibility
- Little Quality Assurance
Towards World Class - Structured Doctoral Programs

• 13 Research Training Groups

• 5 International Graduate Schools (Neuroscience, Social Sciences, Material Science)

⇒ Scientific Supervision (Interdisciplinary) Exchange
Structured Study Courses
Soft Skill Training
External Evaluation
Doctoral Phase
- Future Aims

“Humboldt Graduate School”
- Umbrella Organization for
  - Accreditation
  - Quality Assurance
  - Fundraising
  - Alumni Relations
Towards World Class
- Junior Professorships

50 Junior Professorships (No. 1 in Germany)

- 6 Year Program
  No Habilitation Required
  Independent Research
  Responsibility for Research Team
  Teaching
  Evaluation after 3 Years

- Planned Ratio 1:4 to Tenured Professors
Towards World Class - Post Doctoral Phase

- 20 Junior Research Groups (No. 1 in Germany)
- 17 Independent Principle Investigators

⇒ Independent Research
Partly: Responsibility for Research Team
External Evaluation
Recent Reforms

1. Financial and Structural Autonomy
2. Fostering Young Researchers
3. Networking
4. Establishment of a Comprehensive Quality Management System
Networking - Challenges

- Need for Interdisciplinary Research
- Need for “Critical Mass” of Researchers
- Competition for Limited Funds
- Need for Collaboration to Save Costs
- Strong External Research Institutes
Shaping Our Profile - Interdisciplinary Centers

Interdisciplinary Research Centers
• Up to 12 Centers
• Duration 5 Years
• Quality Assurance: Evaluation
• Example:
  Center for Infectional Biology and Immunology
Networking - Collaborative Research Centers

14 Collaborative Research Centers (No. 1 in Germany)
• Combines Scientists within one University/City
• Duration 12 Years
• Quality Assurance: Evaluation
Joining University and External Research Institutes

Joint Professorships

- Appointing a Senior Researcher of External Research Institutes as Professor
- Today: 29 Professors Linking with 7 External Research Institutes

Joint Programs for Junior Researchers

- Joint Graduate Schools
- Joint Junior Research Groups
- Joint Junior Professorships
Humboldt-Universität in Berlin-Adlershof

Science and Technology Park
12 External Research Institutes (884 Scientists)
365 High Tech Companies (3,300 Employed)
6 HU-Institutes (110 Professors, app. 600 Assistants, app. 6,500 Students)

Media City
115 Companies (950 Employed)

Business Park
165 Companies (4,200 Employed)
World Class Universities - What Do We Need?

1. Excellent Scientist, Junior Researchers and Students
2. Excellent Research Conditions, Networking
3. Quality Assurance, Corporate Identity, Alumni Relations
4. Money