Grenoble Alpes University Hospital – CHUGA (CHU Grenoble Alpes)

Grenoble Alpes University Hospital is the reference hospital in the alpine region.

Population of the region: 2 million people
At the heart of a unique health ecosystem in France
Grenoble: a unique health ecosystem in the heart of the Alps
Grenoble: a unique health ecosystem in the heart of the Alps

5th most inventive city in the World (Forbes, July 2013)

Strongest focus on research in France

A UNIQUE ENVIRONMENT IN MEDICAL TECHNOLOGIES

- Computer-assisted medical interventions
- Clusters for medical research and innovation
- Silver economy
- Medical software expertise

World firsts « made in Grenoble »:

- First neurosurgery robot
- First navigation of total knee surgery
- Totally robotic reversal of Omega-Loop gastric Bypass to normal anatomy
A Hospital in partnership with a world-class University

- Shanghai ranking: French top 7 / World top 200
- Reuters’ 2016 most innovative universities: # 93

✦ In 2016, Grenoble Alpes University was granted the IDEX Label - Excellence Initiatives – by an international jury.

✦ This label, granted to only 10 French Universities, aims to create world-class teaching and research centers of excellence.

2016: Grenoble voted « Best French city to study »

- Medical and pharmacy schools: at the edge of innovation in education

✦ A tradition of innovation in education:
  Problem-based education, tutoring, flipped education, digital platforms

✦ Pilot for the implementation of tablet-based examinations for the National Residency Test

✦ Regional simulation center – Opening scheduled end of 2017

✦ New shared campus with nursing schools – Opening scheduled in 2018

2016: Grenoble Medical and Pharmacy schools in French top 3 at National Residency Test
At the heart of
Grenoble Alpes University Hospital
Main locations of the University Hospital

• **Northern Site – La Tronche**
  - Michallon Hospital
  - Parents and Children’s Hospital
  - Biology and Pathology Institute
  - Medical and Pharmacy schools
  - Nursing schools
  - Research Institutes

• **Southern Site – Échirolles**
  - South Hospital
  - Rehabilitation Institute
  - Southern Center for Gerontology
  - Nursing schools
Grenoble Alpes University Hospital

- Teams striving for excellence
  More than **8 000** professionals caring for patients
  **1 700** physicians

- Capacity
  More than **2 100** beds and outpatient places

- Medical activity
  **3 100** births
  **37 500** surgical procedures
  **180** transplants
  **563 000** days of hospitalization
  **790 000** outpatient visits
  **100 000** emergency visits

- Budget
  Operating budget: **675 M€**
  Investment budget: **28,7 M€**
Grenoble Alpes University Hospital is a teaching hospital, offering all medical specialties.

On the international stage, Grenoble’s main areas of excellence are:

**CLINICAL CARE**
- **Neurosciences**: neurology, neurosurgery, neuro-imaging
- **Complex traumatology**: 1st trauma center in France
- **Technologies for Health**
- **Chronic diseases and cancer**
- **Reproductive health**: genetics and epigenetics

**RESEARCH AND INNOVATION** in association with Grenoble Alpes University and partner research institutes
- Hospital-University Federation **NeuroPsyNov**
- Grenoble Institute of Neurosciences (GIN)/INSERM
- Simulation training centers
- **TIMC-IMAG lab**, dedicated to computing and applied mathematics in biology and health/CNRS
- **Clnatec**, innovation center on health technologies/CEA
- **Institute for Advanced Biosciences (IAB)**
  - Dedicated to epigenetics, chronic diseases and cancer/INSERM
- **HP2 lab**
  - Dedicated to sleep apnea and hypoxia / INSERM
Maintaining momentum in research

National research rankings:
• Clinical trials: 9th
• Scientific articles: 13th
• Department of Clinical Research and Innovation (DRCI): 7th

1,050 research projects underway

50 million € budget dedicated to research

2014: Lasker Prize awarded to Prof Benabid from Grenoble University Hospital for his research on Parkinson disease.
One of France’s top trauma centers

Emergency operating rooms: 4,600 procedures

• Emergencies

Emergencies: 100,000 visits
Emergency medical regulation (SAMU): 226,195 cases handled
Emergency medical regulation (SMUR): 4,581 land callouts
1,384 helicopter callouts

• Anesthesia and Intensive care

1,000 patients requiring trauma intensive care each year

36 surgical intensive care beds
18 medical intensive care beds
16 surgical continuous care beds
10 medical continuous care beds
An advanced medical-technical platform

Biology and Pathology Institute
- A new building opened in 2011
- One of only two automated platforms in microbiology in France

Surgery
- 1 DA VINCI Robot

Imaging
- 4 MRIs
- 5 CT-scans

Radiotherapy and nuclear medicine
- 3 particle accelerators: 2 TomoTherapy / 1 Clinac
- 4 gamma cameras

Clinical pharmacy
- Practicing pharmacy at « patients’ beds »
- In France, a discipline invented in Grenoble to:
  - Improve patient safety
  - Optimize drug prescriptions
Moving towards the future
A new Technical Platform – 2019

- Renovating the emergency department to optimize care pathways
- Bringing together intensive care and continuous care units
- Building a roof heliport
A new innovative Interventional Platform – 2019

- State-of-the-art operating rooms dedicated to each discipline
- 3 zones: High turnover – Complex cases – Emergencies
- A platform including radiology and interventional medicine

A 50-place unit for outpatient surgery

State-of-the-art equipment
• Refurbishing admission lobbies:
  - More modern
  - Easier to navigate
  - More hospitable
  - More attractive

• Moving high-flow consultations to a dedicated area
  - A project planned to optimize patient pathways within the hospital
  - Objectives: improving ambulatory flows and patient orientation
- Residential areas
  - More attractive
  - Brighter
  - More comfortable
- New outdoor areas
- Improving accessibility for people with reduced mobility
International partnerships
CHUGA International 2016-2020

• Our international vision
  Inventing hospital’s future through international outreach

• Main objectives
  Building strategic partnerships, especially in research
  (fundamental – translational – clinical)
  Promoting CHUGA’s expertise and centers of excellence
  Supporting openness to the world and international mobility
  Strengthening « pro bono » and humanitarian actions

• CHUGA’s motto for international action
  Meaningful projects. Only.
Strengthening international partnerships

CHUGA belongs to a **strong international network** through Université Grenoble Alpes (UGA):
- **653 partner universities** - 81 countries
- **180 nationalities on Grenoble campus** - 20 languages taught
- **5 Erasmus Mundus Masters** - 53 double degrees

The IDEX (Excellence Initiative) label is a strong incentive for CHUGA and UGA to strengthen international strategic partnerships

In addition to these academic partnerships, CHUGA develops its **own international collaborations** - see next slides

Main actions to implement CHUGA’s international strategy:

1. **Foreign professionals’ welcome policy**
   - Toolbox available on the Intranet
   - Dedicated pages on Website

2. **Strategy to support international mobility**

3. **International patients’ welcome policy**

4. **Newsletter dedicated to international activities**
# Main international partnerships

<table>
<thead>
<tr>
<th>Country</th>
<th>Partner</th>
<th>Main actions</th>
<th>Good to know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>&quot;Doctors without borders&quot;</td>
<td>Pool of CHUGA's emergency doctors working part-time with MSF</td>
<td>CHUGA: only French University Hospital with a strategic partnership with the NGO</td>
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<tr>
<td></td>
<td></td>
<td><strong>Future cooperation</strong></td>
<td></td>
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<td></td>
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<td>Continuous training, best practice exchanges</td>
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<tr>
<td>Canada</td>
<td>Quebec University Hospital and Laval Medical School</td>
<td>Psychiatry - exchange of residents</td>
<td>Grenoble Medical School is part of this joint agreement</td>
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<td></td>
<td></td>
<td>To be expanded to other medical specialties</td>
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<tr>
<td>Russia</td>
<td>Irkustsk State Medical University</td>
<td>- Exchange of French-speaking medical students and residents</td>
<td>In 2016, 20-year anniversary of cooperation between Irkutsk, CHUGA and UGA</td>
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<td></td>
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<td>- Joint symposiums</td>
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<tr>
<td>Mauritania</td>
<td>Health Ministry – Mauritania</td>
<td>Kidney transplant in Cheikh Zayed Hospital (Nouakchott)</td>
<td>Mauritania to become the 1\textsuperscript{st} country in Western Africa to offer kidney transplants</td>
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<td>Morocco</td>
<td>Cheikh Khalifa Ibn Zayed Foundation – Casablanca</td>
<td>- Simulation training</td>
<td>Foundation created by his Highness Mohammed VI.</td>
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<td></td>
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<td>- Exchange of senior professionals and students</td>
<td>It runs Hospitals and a Health University.</td>
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## Focus on CHUGA’s partnerships with China

<table>
<thead>
<tr>
<th>Province in China</th>
<th>Partner</th>
<th>Main actions</th>
<th>Good to know</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jiangsu</strong></td>
<td>Suzhou’s 2\textsuperscript{nd} affiliated hospital of Soochow University</td>
<td><strong>Current actions</strong>&lt;br&gt;- Neuro-imagery&lt;br&gt;- Rehabilitation medicine</td>
<td>Suzhou’s 2\textsuperscript{nd} affiliated hospital will be 1 of the 2 reference trauma centers of the municipality (13 million inhabitants)</td>
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<tr>
<td></td>
<td></td>
<td><strong>Future cooperation</strong>&lt;br&gt;- Trauma center system organization&lt;br&gt;- Neurosciences&lt;br&gt;- Orthopedics</td>
<td></td>
</tr>
<tr>
<td><strong>Zhejiang</strong></td>
<td>Provincial Health and Family Planning Commission</td>
<td><strong>Current actions</strong>&lt;br&gt;- Exchange of high-level delegations&lt;br&gt;- Short-term trainings of visiting doctors</td>
<td>6 visiting doctors spent 2 months in CHUGA in 2016, coming from 3 University Hospitals of Zhejiang Province</td>
</tr>
</tbody>
</table>
International patients

• Due to its location, at the heart of the Alps and close to Switzerland and Italy, CHUGA has a long tradition of welcoming international patients.

• Specific tools have been developed for these patients with special needs:
  – Dedicated administrative staff
  – Communication tools: welcome guides
  – Agreements with local hotels, with special prices for hospital patients

• International patients’s welcome policy is currently being upgraded and will soon include:
  – Strengthened translation capabilities
  – Dedicated pages on Website
  – Specific and more flexible billing procedures for patients referred through institutional partnerships

• First results of this strengthened welcome policy:

  Since June 2016: more than 40 Koweiti patients hospitalized at CHUGA, mostly in orthopedics. These patients are all referred by the Koweit Embassy.

  2016: more than 15 patients hospitalized at CHUGA for live donors’ kidney transplant. These patients mostly come from Eastern Europe, Northern and Western Africa.