Master's thesis at CeMM Research Center for Molecular Medicine in Vienna

The group of **Jörg Menche** at CeMM is looking for a highly motivated master's student interested in performing and analyzing high-content imaging experiments on drug treated cells.

The Project — Your work will make important contributions to an ambitious ongoing project of the Menche lab whose overall goal is to develop a systematic understanding of drug-drug interactions. To this end, we combine various experimental, computational and mathematical tools, in particular high-throughput/high-content screening, image analysis, machine learning and network theory. This master's project is mainly experimental and will be carried out in close collaboration with the team of **Stefan Kubicek** who heads the chemical screening facility at CeMM. Specific tasks include:

- Designing and conducting a high-throughput / high-content screening protocol for measuring drug-induced changes in cell morphology.

- Analysis and validation of selected drug-drug interactions using fluorescence microscopy.

- Analysis of fluorescence microscopy images using image analysis software (CellProfiler, ImageJ).

The Candidate — We are looking for a highly motivated master student who is enthusiastic to work in a young, ambitious and multidisciplinary team and fits the following profile:

- Bachelor in molecular biology/biochemistry/chemical biology or related fields.

- Experimental training in molecular cell biology and biochemistry (e.g. cell culture, cell based assays etc.)

- Keen interest in using state-of-the-art technology (i.e. drug screening facility) in combination with computational methods.

The Institute (www.cemm.at) — CeMM is a flagship institute for biomedical research in the heart of Europe, **Vienna**. We are committed to highest scientific standards as exemplified by recent publications in top journals including Nature, Science and Cell. You will be part of the newly established computational biology team led by Jörg Menche who analyzes large datasets derived from post-genomic technologies through the lens of network science in order to advance our understanding of human disease (www.tinyurl.com/joergmenche). CeMM offers a uniquely dynamic, interactive and international environment and is located in a beautiful building at the center of the Medical University campus, within walking distance of Vienna's historical city center. According to a study by "The Scientist", CeMM is among the **top-5 best places to work in academia world-wide** (http://the-scientist.com/2012/08/01/best-places-to-work-academia-2012). Vienna is frequently ranked the **world's best city to live in**. It is a United Nations city with a large English-speaking community. The official language at CeMM is English, and more than 35 different nationalities are represented at the institute.

Application Details — If you want to become part of our interdisciplinary team and join an institute that has been elected to be among the best places to work and is located in one of the best cities in the world, please compile an application package containing

- A cover letter

- Your CV

- Contact details of two referees

and **submit your application online,** following this link: https://cemm.jobbase.io/job/vlcjutox.

We take career development of our staff seriously and strongly believe in diversity and equal opportunity. We would therefore like to explicitly encourage women to engage in this area of science in which the gender bias is particularly evident. Applications will be reviewed on a rolling basis starting immediately until the position is filled. The starting date is relatively flexible, the sooner the better.