







As part of the EU funded Innovation training network *HiperNav* that links leading European academic and clinical institutions in the domain of image guided liver surgery, the ARTORG Center for Biomedical Engineering Research together with the Department for Visceral Surgery and Medicine of the University Hospital Inselspital (both University of Bern) and together with a CAScination AG, the leading company in image-guided soft tissue surgery are seeking applicants to fill up to three:

PhD positions in Image Guided Therapy with a focus minimally invasive liver and abdominal surgery

with foci on multimodal registration, instrument tracking, catheter guidance, visualization and virtual reality, computer vision and machine learning. The student will integrate and conduct research within a leading team in the domain, allowing exposure to know-how in clinical surgery, academic biomedical engineering research as well as industry. A strong multi-disciplinary focus for translation research will be promoted and fostered. To this end, students are expected to bring their research clinical evaluation stages.

Requirements:

- Experience and/or course work in computer vision, machine learning and statistics/probability is essential
- Completed a degree (Masters or equivalent) in computer science, biomedical engineering, physics, engineering, applied mathematics or other relevant fields
- Good grasp of either C/C++ or python/MATLAB is required
- Excellent verbal and written communication skills
- The candidate is expected to work in a group of diverse experts from both engineering and medical backgrounds
- Company and research internships are a plus
- · Readiness to conduct research work abroad

About the ARTORG and University of Bern:

The ARTORG Center is a multidisciplinary research center part of University of Bern and associated to the Bern University Hospital. The center gathers over 150 researchers of all levels in wide array of Biomedical Engineering topics. For more information, please visit http://www.artorg.unibe.ch. Located in the heart of the Switzerland's capital, the University of Bern provides an international, rich and unique opportunity to conduct cutting edge research at the interface between Engineering and medicine. While German is the spoken language in Bern, English is the working language and German language courses are freely available via the University of Bern. The envisioned duration of the position is of 3-4 years and is associated with a competitive stipend, allowing the individual to dedicate 100% of their time to their research.

Application deadline: 1st September 2016 **Position start date:** November 2016

To apply:

Combine the following documents into a single PDF:

- This form and its elements filed
- CV (academic track record, publications, professional experience, grants, awards)
- Motivation letter (maximum 1 page, font size 10)
- · Contact information of three references
- MSc thesis (if available)

Send this PDF document to Prof. Dr. Raphael Sznitman (raphael.sznitman@artorg.unibe.ch) by email. The email subject should be: "[OPSP-03] Open PhD position".

Important: Emails without this subject may not be read!