

## Department of comparative medicine (KPM)

### Capacity and competence

Oslo University Hospital (OUS) is Norway's largest hospital with more than 20,000 employees and is highly specialised and in charge of national, regional and local hospital assignments. OUS is responsible for approximately fifty percent of all medical and healthcare research conducted at Norwegian hospitals<sup>1</sup>. The laboratory animal facility, Department of Comparative Medicine (KPM), is part of the Research Support services at OUS and is located at Rikshospitalet (RH), Radiumhospitalet (Rad) and Ullevål Sykehus (US). KPM comprise a total area of 3700 m<sup>2</sup> with a current/maximum capacity of 2270/3000 (RH), 800/1150 (Rad) and 790/790 (US) standard rodent cages. KPM is an approved laboratory animal research facility and an approved gmo (genetically modified organisms) facility for mice and for the combined use of mice and gmo microorganisms; the approvals are given by the Norwegian Food Safety Authority and the Norwegian directorate of Health <sup>2</sup> respectively, in accordance with national legislation.<sup>3,4,5</sup>

The RH unit is subdivided into MDU, SPF, Experimental Gnotobiology, Infection (BS2), Quarantine and Large animal units, enabling housing/use of rodents, rabbits, pigs and dogs. IVC cages are the predominant caging system in MDU while cubicles, isocages, isolators are also used in the other units used for rodent housing. Equipment for cardiac surgery, radiation and hypoxic exposure, and phenotyping by echocardiography, pressure measurements, metabolism and optical imaging of rodents is available. The Rad unit focuses on cancer research and immunocompromised rodent models, and is hence subdivided into a SPF and a SOPF unit for rodents. Equipment for optical imaging, MRI, radiation exposure, and radionucleotide exposure of rodent tumor models is available. The US unit focus on cardiovascular research and equipment for cardiac surgery and hypoxic exposure, and phenotyping by pressure measurements, echocardiography, preclinical MRI, exercise (treadmill), telemetry and automated blood sampling in rodents is available. A second preclinical MR combined with PET is scheduled to be available from 2020.

### Animal ethics

Experiments at KPM are carried out in accordance with institutional guidelines, national legislation and the European Union Directive 2010/63/EU on the protection of animals used for scientific purposes<sup>6</sup>. Researchers who perform animal experiments must hold a FOTS ethical approval with a unique project license number for each project. The approval is given by the Norwegian Food Safety

Authority, according to the Norwegian National Legislation on animal experimentation. Personnel who design the projects and/or handle the animals are trained and educated following the described functions A/B/C in article 23 of Directive 2010/63/EU<sup>7</sup>, equivalent to the FELASA (Federation of Laboratory Animal Science Associations) category B/C.

<sup>1</sup> <https://oslo-universitetssykehus.no/oslo-university-hospital#about-the-hospital>

<sup>2</sup> [https://oslo-universitetssykehus.no/fag-og-forskning/forskning/regional-forskningsstotte/komparativ-medisin#genmodifiserte-organismer-\(gmo\)](https://oslo-universitetssykehus.no/fag-og-forskning/forskning/regional-forskningsstotte/komparativ-medisin#genmodifiserte-organismer-(gmo))

<sup>3</sup> [Regulation on animal experimentation, §5](#)

<sup>4</sup> [Regulation on contained use of GMO animals, §8](#)

<sup>5</sup> [Regulation on contained use of GMO microorganisms, §7](#)

<sup>6</sup> [EU directive 2010/63/EU](#)

<sup>7</sup> [Education and training framework, Directive 2010/63/EU](#)