

**BIOSEKURITI LABORATORIUM DI *NATIONAL LABORATORY*
ANIMAL CENTER MAHIDOL UNIVERSITY, THAILAND
PERIODE 20 NOVEMBER SAMPAI DENGAN
01 DESEMBER 2017**

Oleh:

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INTISARI

Biosekuriti laboratorium merupakan upaya pengamanan yang ditujukan untuk mencegah, mengendalikan, dan mengelola risiko rantai penyakit melalui pengawasan lingkungan laboratorium. Penulisan Tugas Akhir ini bertujuan untuk mengetahui cara pengawasan lingkungan pada laboratorium di *National Laboratory Animal Center* (NLAC) periode 20 November sampai dengan 1 Desember 2017. Sampel yang diuji berupa sampel udara di dalam ruang laboratorium, air minum hewan coba sebanyak 200 ml, dan sampel permukaan suatu benda di ruang laboratorium. Semua proses pengawasan lingkungan menggunakan media agar yang diinkubasi di dalam inkubator. Pada pengujian *water monitoring*, media agar diinkubasi pada suhu 35°C selama 48 jam, sedangkan pengujian *air monitoring* dan *surface monitoring*, media agar diinkubasi pada suhu 32°C selama 48 jam. Hasil pengujian menunjukkan pada *water monitoring*, terdapat pertumbuhan koloni bakteri pada media agar M-PAC, hasil kadar klorin normal dengan pengujian yang menggunakan *pocket colorimeter*. Hasil pengujian pada *air monitoring* menunjukkan terdapat pertumbuhan koloni bakteri pada penggunaan alat MAS-100 *air sampler*. Hasil pengujian *surface monitoring* menunjukkan terdapat pertumbuhan koloni bakteri pada media RODAC *plate*. Berdasarkan hasil pengujian tersebut dapat diketahui bahwa kondisi laboratorium di *National Laboratory Animal Center* (NLAC) kurang baik.

Kata kunci: biosekuriti, laboratorium, pengawasan lingkungan, NLAC

**BIOSECURITY OF LABORATORY IN NATIONAL LABORATORY
ANIMAL CENTER MAHIDOL UNIVERSITY, THAILAND
FROM 20 NOVEMBER UNTIL 01 DECEMBER 2017**

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ABSTRACT

Biosecurity of laboratory is a security effort aimed at preventing, controlling, and managing the risk of the disease chain through the supervision of the laboratory environment. The purpose of writing this final project is to know how to supervise the environment at the laboratory at National Laboratory Animal Center (NLAC) from November 20 until December 1, 2017. Samples tested in the form of air samples in the laboratory, 200 ml of laboratory animal drinking water and samples surface of an object in the laboratory room. All environmental monitoring processes use agar medium incubated in the incubator. In water monitoring tests, the medium was incubated at 35°C for 48 hours, while air monitoring and surface monitoring tests, the media was incubated at 32°C for 48 hours. The results showed that in the water monitoring, there was bacterial colonies growth on M-PAC agar media, the result of chlorine was in normal level with the test using pocket colorimeter. Test results in water monitoring indicate bacterial colony growth in MAS-100 air sampler. The result of surface monitoring test showed that there was bacterial colony growth on RODAC plate media. Based on the test results that the laboratory conditions at the NLAC is less or lack of control.

Keywords: biosecurity, laboratory, environmental monitoring, NLAC