

**Pengembangan Media Pembelajaran Laboratorium Virtual Berbasis
Discovery Learning Materi Sistem Imun
Kelas XI MIPA**

***Development of Virtual Laboratory Learning Media Based on Discovery
Learning Material of the Immune System
Class XI MIPA***

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Abstract: *This study aims to develop virtual laboratory learning media based on discovery learning of the immune system material and determine the feasibility of a virtual laboratory learning media based on discovery learning of the immune system material. This research is a research and development that adopts the 4-D device development model. In this study the design of the 4-D development was modified into 3 steps (3-D), namely Define, Design, and Develop. The study was conducted at SMAN X Sragen. The research subjects were divided into two, namely limited trial subjects and field trials determined using simple random sampling. Limited trial subjects were taken from each class except the class used for field trials with a total of 4 students per class so that the number of trial subjects was limited to 28 students. Field trial subjects were taken from MIPA 3 class XI with 34 students. The data analysis technique was carried out qualitatively and quantitatively. The results obtained by virtual laboratory media based on discovery learning of immune system material created using adobe animate CC 2017 with design concepts that combine writing, images, animation, and video with characteristics of discovery learning learning models and virtual laboratory media based on discovery learning of immune system material feasible to use in learning based on validity tests from several experts with a very valid level of validity.*

Keywords: learning media, virtual laboratory, immune system, discovery learning

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