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EDITORIAL

Playing and Learning: Introduction to DiscoverRx: A Digital Game for Scientific Dissemination of the Drug Discovery and Development Process Involved in Developing a New Medication

The dissemination of science, specifically Pharmacology, is necessary to enable the general public to understand the processes involved in developing a new medication

This is a task that researchers in Latin America should consider in addition to their activities in laboratories and clinical practice.

Based on the idea that gamification is an interesting form of active learning that ensures better engagement from the audience¹, a multidisciplinary team from the Federal University of Rio de Janeiro, Brazil, has been dedicated to producing games about the process of drug discovery and development. This team is led by Professor Geraldo Xexéo —Ph.D. in Systems and Computer Engineering and an expert in game development— and Professor François Noël —a pharmacologist who was just chosen as the “Pharmacology Educator of the Month” (June) by IUPHAR (International Union of Basic and Clinical Pharmacology)—.

After the release of SCREENER², a board game aimed at postgraduate students in the field of Pharmacology and related areas in November 2021 (www.screener.com.br), it is now the turn of DiscoverRx*, a digital game available for free on Google Play platform and itch.io for use online on a PC or a cell phone (<https://ludesufrj.itch.io/discoverx>).

This time, the researchers target a younger audience who are part of the “native players” generation, raised in a media environment where everything is vivid, graphic, fast, and intense. This type of audience is more attracted to digital games, especially if they can be played on mobile phones. DiscoverRx is an accessible game that seeks to bring knowledge about the subject matter playfully and is developed to provide a fun and educational experience for young people.

Thanks to the use of “Learn More” buttons, the game also allows for the addition of appropriate information for an audience of non-expert adults who are eager for information after the COVID-19 pandemic, which drew public attention to the innovative pharmaceutical industry and its essential role in the prevention, treatment, or control of numerous diseases. Thus, this game created by experienced teachers in Pharmacology, Ludology, and Computer Engineering could become an important tool for scientific dissemination among the population and also be used as supplementary material for undergraduate students in Pharmacy and related fields.

DiscoverRx consists of seven sequential mini-games, each corresponding to one of the seven stages of the drug discovery and development process described in the SCREENER game: identification of active substances (hits), from hits to lead compounds; optimization of leads; selection of a drug candidate; and finally phase I, II, and III clinical trials. The conceptual art was designed with the aim of playful communication, creating inclusive characters, and avoiding emotional triggers or reinforcing stereotypes.

The publicly released version contains the first three mini-games. This version (1.0) will automatically update as the authors create and release the other four mini-games. The game includes the option for players to choose between four languages (Portuguese, English, Spanish, and French) to reach a larger international audience.

Please note that a dedicated homepage for this game has been created, with various information available in the four languages: <http://discoverx.com.br/>

Latin American Journal of Clinical Sciences and Medical Technology strongly supports this type of initiative and invites its readers to play and learn with DiscoverRx. Let's have fun!

*Click the next link to see the DiscoverRx infogram: https://lajclinsci.com/_fi/TD_5/ID_7/banner_marina.jpg

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