WACREN e-Research Hackfest



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Drug Design, Discovery and Development Platform and Repository

Wednesday, 23 November 2016 12:00 (20 minutes)

Nnamdi Azikiwe University-Drug Design and Informatics Group (NAU-DDIG) has established a platform for finding new drug candidates from natural products, existing drugs or chemical databases. We have implemented our Computer Aided Drug Design (CADD) protocols and obtained published and some unpublished results for Neglected Tropical Diseases (NTDs) such as ascariasis, Ebola virus disease, malaria, sickle cell disease and Shiga Toxin producing Escherichia coli (STEC) etc. We intend to design and develop a Drug Design, Discovery, Development Platform and Repository (D4PR). D4PR will be a web-based platform containing an integrated set of tools, applications, data repositories etc., which can be accessed via D4PR portal. We intend implementing the front-end of the proposed platform with HTML, CSS and JavaScript while incorporating Bootstrap technology. The back-end will be implemented using PHP scripting language, while integrating standard technologies such as FutureGateway, Open Access Repository, SAML and LDAP for authentication and authorization. The developed application will be hosted on an online web server ported to Africa Grid Science Gateway (AGSG) cloud computing e-infrastructure. Our platform will help to address the disease burdens, especially from NTDs, in Nigeria and Africa in general.

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Session Classification: Presentation of use cases and their implementation stategies continued