

تعبئة الإهتمامات البحثية (نموذج رقم 1)

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2/6/2019	تاريخ تقديم النموذج Submission date	moskhan@ksu.edu.sa	البريد الإلكتروني Email
<p>Misfolding of proteins leading to toxic aggregates and causes various diseases including neurodegenerative disorders such as Alzheimer's, Parkinson's and diabetes mellitus. Plasma proteins are more prone to glycation (Non-enzymatic) owing to its less turnover number and longer half-life. Glycation altered structure and function of proteins. Antibodies have been used as tools in a range of applications such as in basic research, diagnosis, biotechnology, and even human therapy. They have also been used for drug delivery, or as a stimulant for human immune responses in cancer therapy, and have also been reported to be useful in the treatment of amyloidosis-associated diseases. To the best of our literature, Camelid or camel antibodies (IgG) did not explored for its glycation and aggregation studies despite of their unique structure. In this project, camel IgG will be purified using chromatographic techniques. Subsequently, glycation and aggregation of camel IgG will be analyzed using various biochemical and biophysical techniques viz; UV-visible spectroscopy, Spectrofluorometer, SDS-PAGE, Circular dichroism (CD) and transmission electron microscopy (TEM). Various polyphenols will be screened to evaluate their antiglycating and anti-aggregating potential.</p>			الإهتمامات البحثية Research interests (~100 words)
<p>Post-translational modification (Glycation) induced aggregation of Camel (IgG) antibodies and their inhibition using polyphenols</p>			المواضيع المقترحة للمشاريع البحثية للطلبة الدراسات العليا (الماجستير) Proposed topics for master research projects
<p>Yes</p>			الابحاث المنشورة مع طلبية الدراسات العليا Publishing with post graduate students
<p>تقنيات ضمن خطة البحث, مواد و تجهيزات, samples, عينات Techniques within the research plan</p>			توفر مستلزمات المشروع Availability of project supplies
<p>1</p>			العدد المقترح للإشراف على طلبية الدراسات العليا وحسب اللائحة According to the regulations, proposed number of supervised postgraduate students
<p>I confirm that the information given in this form is true, complete and accurate.</p>			إقرار

	Endorsement
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