Till Ekhagastiftelsens styrelse November 2017

Återkommande till styrelsens frågor gällande tre ansökningar får Vetenskapliga Rådet här inkomma med en komplettering.

För varje ansökan kommer först det ursprungliga utlåtandet och sedan VR:s komplettering.

Diarienr	Projekttitel		Sökt belopp
	Sökande	Förvaltande organ	Föredragande
9	Den mikrobiella tarmflorans sammansättning och benägenheten för inflammation och depressionssymtom hos unga vuxna patienter.		1 310 000 kr för 1½ år
M	Janet Cunningham	Uppsala universitet	MJ

The aim of the present study is to investigate whether there are specific gut microbial flora enterotypes in young adults that may make them more vulnerable to develop inflammation or psychiatric disorders.
The study is of a fundamental character as that is explores possible linkage , via biomarkers, between the gut microbial flora and inflammation/psychiatric disorder. This project is of low relevance to the Ekhagastiftelsen since it does not align so well with Ekhaga's goals to support research which investigates better nutrition, natural medicines or healing practices to support and promote health.
The objective of the study is partly new and partly confirming, as many studies have been performed demonstrating the linkage between the gut-flora and inflammation. The methodology is well-established and mainstream metagenome evaluation. The applicant seems to have good competence in this field of research. The time plan and budget seems reasonable.
Rejection in the prevailing priority order.

Komplettering

This application was regarded by the VR as of lower relevance and therefore it would have been more appropiate to advise: "avslag", rather than "avslag i rådande prioriteringsläge" as the board pointed out.

The board asked why this application is not relevant, especially since Ekhagastiftelsen earlier has evaluated gut microbial flora as relevant and awarded grants to such research.
It is like Torkel commented at the board meeting. The study is of a fundamental character as that is explores possible linkage , via biomarkers, between the gut microbial flora and inflammation/psychiatric disorder. This project was evaluated of low relevance to the Ekhaga stiftelsen since it follows a more reductionistic research approach. With the results of the study, the applicants hope to identify a subgroup of patients in psychiatry that may benefit from treatment that targets the immune system and/or the microbial flora, for example through transplantation. This does NOT align well with Ekhaga's aim to investigates whether a better nutrition, natural medicines or healing practices can support and promote health.

In response to the question of the board “if the low relevance is because the project only looks at the composition of the gut microbial flora and its connection to inflammation and depression syndrome, and not how to improve the gut microbial flora to avoid inflammation and depression (ie, how the gut microbial flora is primarily affected to cause inflammation and how to you can avoid this)”.
Yes indeed, it was evaluated this way by the VR.

50	Market Class Genetics and the Development of Improved Carrot Germplasm for Organic Production Systems		1 367 416 kr för 3 år
L	Brenda Egan	University of Wisconsin	ESJ

The project aims at improving the understanding of the genetic basis of carrot from different market classes, especially for giving the background for breeding new carrot cultivars for organic systems. The project has relevance in the context of the Ekhaga Foundation, due to the focus on breeding for organic food. The research question is interesting and the methodology well described. The applicant has high competence for carrying out the project.
Rejection in the prevailing priority order.

Komplettering

The project aims at improving the knowledge onthe genetics of carrot to understand the genetic control of root shape and quality for different market classes. The overall aim is to develop a a genetic model to be used in breeding new carrot germplasm/cultivars for organic and other farming systems.

It is essential to enhance the diversity of the carrot and other crops species, which currently are based on a narrow genetic base. The development of new carrot cultivars is restricted due to the IPR (Intellectual property rights) of the relative few cultivars in the European and US markets. The genetic and phenotypic diversification of carrot and other crops is important , especially in organic farming, since diversification may increase resistance to diseases, competitive effects against weeds, water and nutrient use efficiency, nutritional quality and consumer interest.

The project has a high relevance in the context of the Ekhaga Foundation, due to the basic research related to breeding for greater diversity in carrot for organic and other farming systems. The research question is interesting and the methodology is advanced and well described. The applicant and PhD student to be employed have high and good competences for carrying out the project.

Proposal to award funding with SEK 1 200 000

71	From annual to perennial cereals: domestication of a perennial barley relative for cultivation with less environmental impact and higher grain quality		1 292 000 kr för 3 år
L	Anna Westerbergh	Sveriges Lantbruksuniversitet	ADG

Projektet syftar till att undersöka och inleda domesticering genom selektion och förädling av knylkorn (Hordeum bulbosum) med förädlingsmålet att ta fram ett odlingsvärt perennt sädesslag. Projektet har hög relevans med avseende på stiftelsens ändamål. Frågeställningen är intressant och arbetsplanen har i huvudsak en etablerad metodik men har inslag av deltagardriven forskning. Sökanden har mycket hög kompetens. Kostnadsplan och tidsplan är rimlig.
Reservlista: Anslag beviljas med 1 150 000 kr.

Komplettering

Relevans för Ekhagastiftelsen
Projektet syftar till att genom domesticering få fram odlingsvärda sorter av knylkorn. Man vill komma närmare en perenn stråsädesgröda genom att utgå från vilda stammar av knylkorn.
I förädlingsmålet ingår även motståndskraft mot sjukdomar. Det finns resistensgener mot stråsädessjukdomar i knylkorn. Det är vanligt att man i förädlingsarbete korsar in resistensgener från vilda släktingar till en gröda. I detta fall börjar man ”från andra hållet” och utgår från vilda varianter av knylkorn med två mål, en perenn gröda med goda resistensegenskaper.
Ett stort genetiskt material ska prövas på gårdsnivå. Lantbrukare kommer att vara med i utvärderingen och urvalet av vilka linjer som ska finnas med i vidare förädlingsarbete.
I arbetet kommer sorternas motståndskraft mot sjukdomar och övervintringsförmåga att vara viktiga urvalskriterier.

Projektet ligger i linje med stiftelsens ändamål att få fram ”bättre och sundare livsmedel” och att i odlingen ”undvika konstgjorda kemiska preparat”.
Projektet är innovativt och av pilotkaraktär samt har stort nyhetsvärde.