

**Call for interested industrial partners to work in collaboration with NRCE for developing Nanobased products using biomacromolecules for tissue repair**

1. Name of Technology: Biomacromolecules for tissue repair
2. Name of the Institute: ICAR-National Research on Centre on Equines (NRCE)
3. Ownership of the technology: Indian Council of Agricultural Research (ICAR)

**Section 1: Contact Information**

**4. Contact details:**

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**Section 2: Technical Description**

**5. Technology Details:**

Impaired healing causes increased pain, suffering, and decreased mobility in affected animals and human beings. The wounds may be apt to infection depending on the depth. There are many treatments which promote healing, including topical antiseptics and antibiotics. However, the emergence of antibiotic resistant bacteria underlines the importance of finding more effective agents with shorter time of application and novel mechanisms of action. There is a pressing need of alternatives to conventional therapy, having anti-inflammatory/proliferative/antibacterial properties. Nanoformulation aided delivery using biodegradable scaffolds mimicking extracellular matrix are the novel substitute for tissue repair with minimal side effects and accelerated healing. We have developed novel and safe nanoformulations having antibacterial/anti-inflammatory/re-epithelization properties giving encouraging results in in-vitro studies and lab animal models. Our experiences in this area opened up new opportunities to explore the nanoformulations to provide the safe and accelerated healing materials.

We are seeking collaborations with the industry to develop bioink based nanoscaffolds/topical sprays/topical cream/lotion/oral supplements for suitable large scale production and its further evaluation.

**6. Licensing Terms**

- a. Nature of License: Non-Exclusive
- b. Other terms and conditions will be decided after mutual discussion with the interested industrial partner.

**Section 3: Certifications and approvals**

It is certified that the above information about the technology nominated for transfer is correct and no security sensitive/confidential and proprietary information has been provided.

  
24/11/18

I/c ITMU  
ICAR-NRCE, Hisar