

SUBMISSION FORM
University System/Employee Intellectual Property Joint Participation
MUSP 407

This form is to be submitted with any Board of Regents item whereby a campus seeks the approval of an agreement with or arrangement regarding an employee pursuant to 20-25-109 MCA and Regents Policy 407.

When the submission concerns matters of trade secrets or confidential business information, or any other matter entitled to privacy under state or federal law (e.g., the federal statute known as Bayh/Dole) the submitting campus may request consideration of the submission, in whole or in part, in executive session.

The submitting campus should also provide the Commissioner a copy of the contract(s) that form the basis for the cooperative arrangement for which approval is sought. Submission of the contract does not indicate a conclusion that all or part of the contract is a public document and the question of whether it is in whole or in part protected from public disclosure will be evaluated on a case by case basis.

1. Summarize the nature of the intellectual property that was developed by the employee seeking approval. Indicate the sources of funding for the research that resulted in this invention.

NanoMagnetic Solutions LLC is a spin off group from a ECE CAPSTONE undergraduate team which was sponsored and advised by Dr. Kunze in the AY 2019/20 with the goal of commercializing tools that get developed in the Kunze Neuroengineering Lab towards subcellular biomechanical stimulation using magnetic fields and nanoparticle-mediated forces for neural tissue engineering. The tool is a device which imposes permanent magnetic field gradient patterns to standard Petri dish cultures. Its uniqueness is defined through superimposing a distinct magnetic field gradient pattern from a set of over a billion to cell assays in a reproducible and controlled manner. A first prototype was developed and tested in 2018 which led to a provisional patent in March 2019.

Source of funding at the initial state has been MSU VPRED sponsored faculty start-up funding for the PI Dr. Kunze (granted in August 2016). Further product enhancement and testing specifically related to calcium signaling are now funded through the NSF CAREER award by Dr. Kunze.

NanoMagnetic Solutions LLC has successfully participated in a first Venture Competition at MSU and placed second with a 6,000 US\$ monetary award by the MSU Alumni Foundation.

2.

a. Name(s) of the university employee(s) involved.

- Dr. Anja Kunze
 - Lead Inventor of intellectual property
 - Assistant Professor, Electrical and Computer Engineering, MSU

b. Name(s) of business entity(ies) involved.

NanoMagnetic Solutions, a new technology startup / spin-off in Bozeman, MT (not yet formed).

3. The university and employee(s) are seeking approval for (check as many as appropriate):

- a. The employee to be awarded equity interest in the business entity
- b. The employee to serve as a member of the board of directors or other governing board of the business entity
- c. The employee to accept employment from the business entity
- d. Other. Please explain.

4. Summarize the nature of the relationship between the university and the business entity (e.g., the entity is licensing the intellectual property from the university, the entity is co-owning the intellectual property with the university).

NanoMagnetic Solutions is currently negotiating with the MSU Technology Transfer Office (“TTO”) regarding possible relationships for the future. Both relationships, co-owning and licensing to the company are currently being negotiated.

a. The proposed duration of the agreement or arrangement.

The duration of the license is not yet known. This will be covered in the language of the agreement.

b. The conditions under which the agreement may be terminated or dissolved.

MSU will use the following standard agreement termination conditions:

1. If NanoMagnetic Solutions does not make a payment due and fails to cure such nonpayment within forty-five days after the date of notice in writing of such nonpayment by MSU.
2. If NanoMagnetic Solutions shall become insolvent, shall make an assignment for the benefit of creditors, or shall have a petition in bankruptcy filed for or against it. Such termination shall be effective immediately upon MSU giving written notice to NanoMagnetic Solutions.

3. If an examination by MSU's accountant shows an underreporting or underpayment of NanoMagnetic Solutions in excess of twenty percent for any twelve-month period.
4. If NanoMagnetic Solutions fails to satisfy the performance milestones.
5. Without the obligation to provide notice, if NanoMagnetic Solutions files a claim, including in any way the assertion that any portion of the patent rights is invalid or unenforceable where the filing is by the NanoMagnetic Solutions, a third party on behalf of NanoMagnetic Solutions, or a third party at the written urging of NanoMagnetic Solutions.

All License Agreements (and possible future licenses as provided for by Option Agreements) issued by the MSU Technology Transfer Office in which the inventor seeks business participation are contingent upon this BOR 407 approval. This is stated in the License Agreement.

5. Explain specifically how the University System or the State of Montana will likely benefit from the agreement or arrangement.

- a. The IP owned by MSU under the negotiated license provides MSU with annual maintenance and sublicensing fee income and royalties will generate revenue upon successful commercial development of the technologies
- b. Technical advances in the field with public and private contribution provides both academic and economic development
- c. Collaborative research opportunities for Montana State University and its students
- d. Work-force development in the biotechnology sector will offer graduating students from MSU additional employment opportunities allowing to stay in Montana after graduation.

6. Summarize the financial terms of the agreement or arrangement. Include:

a. The value, nature and source of the University's contribution.

MSU will pay for patent costs and will be reimbursed by NanoMagnetic Solutions per the upcoming license agreement. TTO will pursue patent prosecution and provide marketing services and personnel hours. MSU will own any patents and retains the right to use the technology and patents for academic research or other not-for-profit scholarly purposes.

b. The value and nature of the employee's contribution.

As an MSU inventor, Dr. Kunze will assist in the preparation and completion of the patent filings.

c. The anticipated revenue to be generated by the project and the timeline for generating such revenue.

The license agreement will set performance milestones for sales of the licensed technology, as well as annually due sales and marketing reports. There is no way to determine anticipated revenue at this early stage.

d. The manner in which revenue and expenses will be shared by the parties.

Royalty revenues will be shared by MSU and the inventors after payment of a development fee to MSU and collection of any unreimbursed patent costs. All expense information will be detailed in the confidential agreement language.

e. The nature of each party's equity interest in the project. If none, so indicate.

Dr. Kunze is a co-founder of NanoMagnetic Solutions. However, product refinement is underway associated with the Kunze Neuroengineering Lab. Dr. Kunze currently holds no equity in NanoMagnetic Solutions but plans in the near future.