Request for Proposal RFP_2019_0122: Cell Evaluation to Reproduce a State of Cell in Body Exercise

RFP Title	Cell Evaluation to Reproduce a State of Cell in Body Exercise
Due Date	08/05/2019
Opportunity	
Timeline	
Financials	
RFP Description	NineSigma, representing **a leading food manufacturer whose annual sales reach tens of billions of dollars** ("Client"), seeks **cell evaluation technology to reproduce a state of cell in bodies in exercise**. The technology described above is considered necessary to identify foods capable of enhancing efficacy of exercises. We welcome proposals from a wide range of fields such as drug development or general bioscience, regardless of any experience in food science.
Background	
Key Success Criteria	**Development target of the cell evaluation** • Data on any one of the following items that demonstrate the reproduction of stimulus derived from exercises: • Capable of observing signal variations showing muscular hypertrophy or enhanced muscle endurance. • Signal example of muscle hypertrophy: Acceleration of mTOR signal (Phosphorylation by mTOR, S6K, S6, 4EBP1, etc.) • Signal example of enhanced muscle endurance: Acceleration of AMPK signal (Phosphorylation of AMPK, nuclear localization of PGC-1α, membrane localization of GLUT4, etc.) • Capable of observing a condition or signal that is considered showing the reproduction of a cell in exercise • A response to stimulus imitating an exercise exhibits both of the following characteristics: • Strength dependence • Reproducibility • Technology that excels in throughput performance and simplicity is preferable but is not essential. Cell evaluation technology that meets the above criteria is sought, but a track record of its application to foods is not taken into consideration at present.
Area of Interest	Engineering-Electrical > Sensors > Electric Current Sensors
Possible Approaches	**Possible Approaches** The Client expects technologies such as the following approaches, but is open to others: • Cell evaluation that reproduces a cell in body exercise • Electric stimulus • Magnetic stimulus • Dynamic stimulus • Chemical addition • Hypoxic cell culture

- Technology with characteristics, superiority, or know-how in evaluation conditions

Approaches not of Interest

Approaches Not of Interest
The following approaches are not of interest:
- Approaches that have been commonly used without specific characteristics or superiority over the conventional technologies
- Proposals at concept level that do not include data on evaluation

Preferred Collaboration Types

Items to be Submitted

Background
The Client engages in the development of technologies to screen foods that can strengthen a efficacy of body exercise through cell evaluation. To establish a cell evaluation system that reproduces body exercise based on responses to stimuli such as electric stimulation, hypoxic cell culture, chemical addition, etc. have been tried, but these approaches have challenges in the difficulty of technology introduction and poor exercise reproducibility.
Therefore, the Client has decided to make this RFP to quickly identify a prospective technology development partner, aiming at solving the technological challenges and putting the technology to practical use at an early stage.

Notes on Response
Proposal shall have clear points and should not include confidential information.
Supplemental files may be submitted in addition to the proposal.

Response evaluation
The client will evaluate all responses with the following criteria.
- Overall scientific and technical merit
- Approach to proof of concept or performance
- Economic potential of concept
- Realism of the proposed plan (action items, timeline, roles, deliverables, cost estimation)
- Potential for proprietary position
- Respondents' capability and related experiences

Anticipated Project Process
After the submission due date, the client will review all submitted proposals. NineSigma will send the review results to each proposer 6-8 weeks after the due date. The client possibly asks clarifying questions before selecting the most suitable candidates for collaboration. The client will select best candidates through evaluations. During the selection process, the client may execute NDA with selected respondents, seek further information disclosure, and discuss specific development targets or potential opportunities.
The client will execute necessary agreements with the selected respondents and move to the advanced development phase. Specifics of any collaboration will be determined through consultation with the concerned parties.

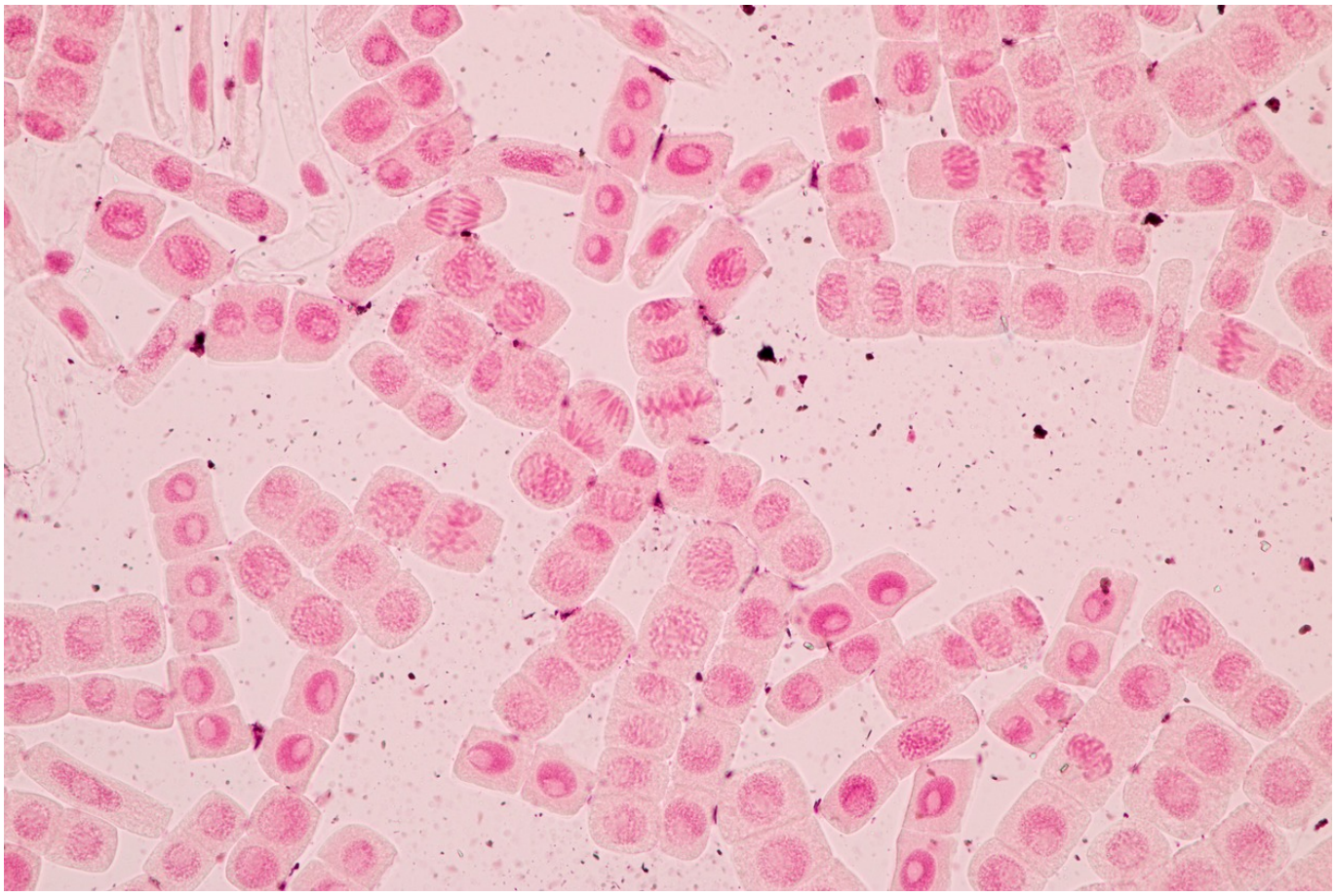
Award Amount

Attachments

	Name	Creation Time	Size	Created By
	RFP_2019_0122_Cell Evalua...	07/01/2019 09:37 PM	174.94 kB	Kimihiro Tanaka
	AdditionalInformationShee...	07/01/2019 09:37 PM	257.58 kB	Kimihiro Tanaka

Request Number RFP_2019_0122

Picture



Creation Time: 07/02/2019 08:42 PM