

## Director



The Director, Young-Ho CHO, received the Ph.D. degree from the University of California at Berkeley (UCB). Previously he was with Berkeley Sensor and Actuator Center (BSAC) at UCB. In August 1991, Dr. Cho moved to KAIST, where he is currently a

Professor in the Departments of BioSystems and Mechanical Engineering. Dr. Cho has served for international technical society as the General Co-Chair of IEEE MEMS-2003 Conference, the Program Committee of IEEE Optical MEMS Conference, the Chief Delegate of the Republic of Korea in World Micromachine Summit. Dr. Cho is a member of IEEE and ASME.

## Organization



## Location



## Contact

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National Creative Research Initiative Program  
Ministry of Science and Technology &  
Korea Science and Engineering Foundation



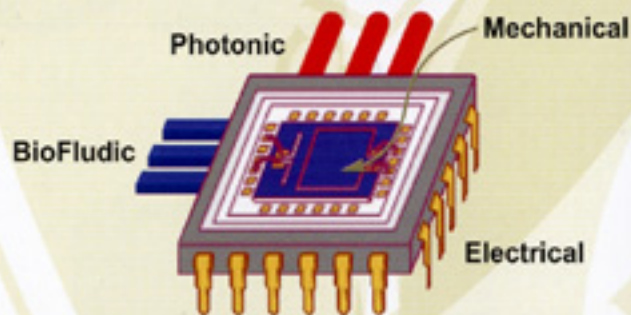
<http://mems.kaist.ac.kr>

**KAIST**

## Vision Statement

Realization and application of a new class of bio-inspired digital actuators for nano/micro realms, overcoming the problems generated by electrical noise, fabrication errors and materials property uncertainty.

## Technology Platform



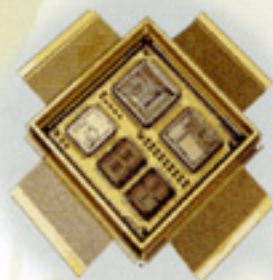
Bio-inspired electromechanical nanolocomotion for high-precision manipulation and low-loss control of non-electrical information carriers in the form of mechanical, opto-radiative, thermo-fluidic, bio-chemical signals and substances.

## Mission & Strategy

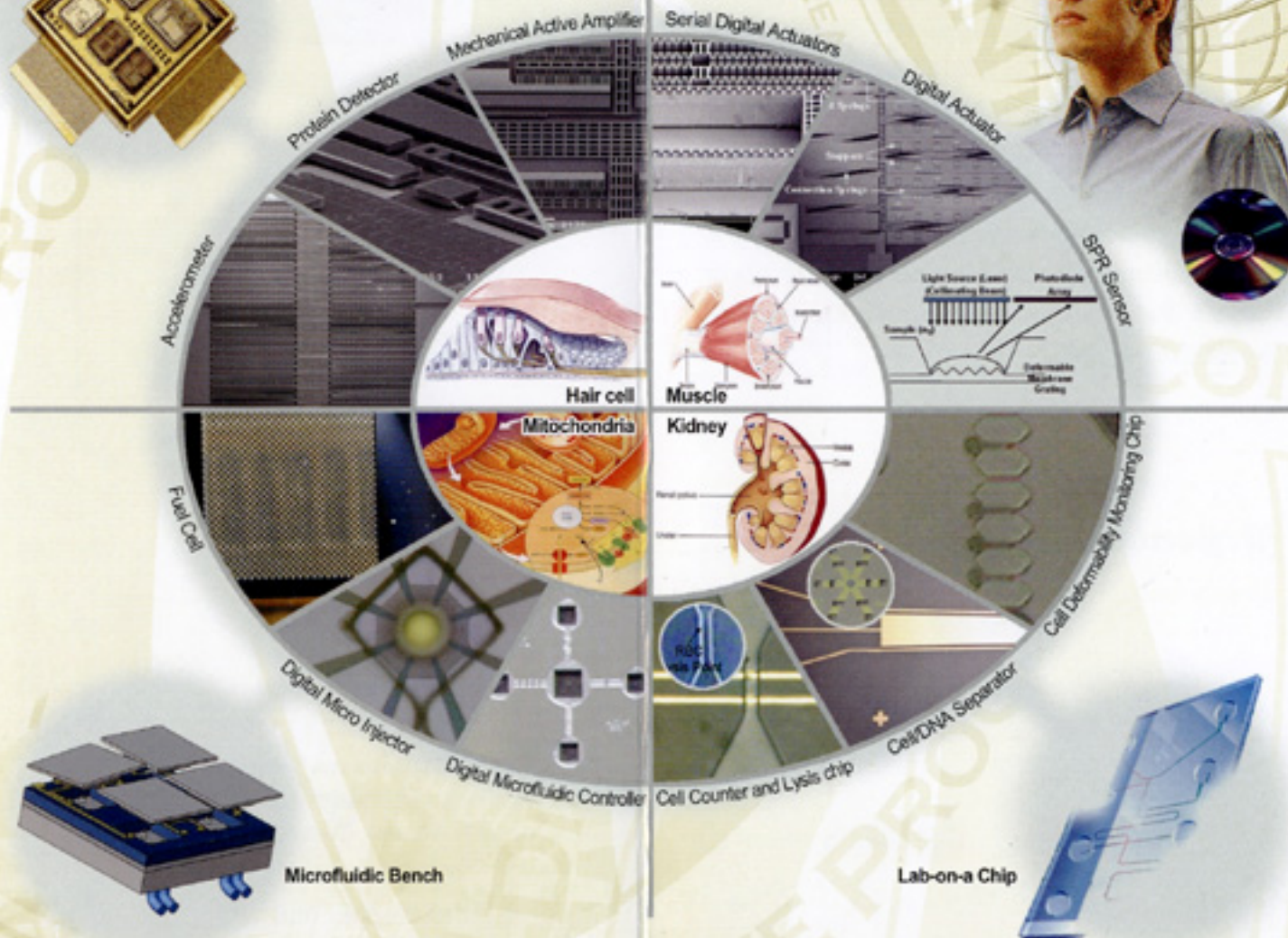
Mission	Strategy
Research and development	<ul style="list-style-type: none"> <li>- Future core technology</li> <li>- High through-put experimental verification</li> <li>- Creative emerging technology fusion</li> </ul>
Education and training	<ul style="list-style-type: none"> <li>- Creative research leader education</li> <li>- Multidisciplinary training</li> <li>- Practical hand-on experience</li> </ul>
Network and collaboration	<ul style="list-style-type: none"> <li>- Technology alliance and networking</li> <li>- Industrial application and transfer</li> <li>- Information, facility and people network</li> </ul>

## Realization of Bio-Inspired Digital Nanolocomotion

### Digital Mechanical Information



Digital Motion Detectors



### Digital Thermo-fluidic Information

### Digital Opto-radiative Information

### Digital Bio-chemical Information