

Sysmex Receives "Minister of Education, Culture, Sports, Science and Technology Prize", and three other awards in 2020 "Kinki Local Commendation for Inventions"

Sysmex Corporation (HQ: Kobe, Japan; Chairman and CEO: Hisashi letsugu) has received Minister of Education, Culture, Sports, Science and Technology Prize, which is a special award, and three Encouragement Prizes for Inventions, at the Kinki Local Commendation for Inventions Awards sponsored by Japan Institute of Invention and Innovation.

The Local Commendation for Inventions Award is a commendation with a long history since 1921 that publicly honors engineers and researchers who created excellent or practiced inventions and designs, for the purpose of improving technologies and contributing to promotion of regional industries, through an encouragement of inventions in local regions.

Award Details

 Special award: Minister of Education, Culture, Sports, Science and Technology Prize <u>Title of awarded invention: Measuring method of hematopoietic stem cell (JP Patent No.</u> 4806334)

Winners: Ayumu Yoshida, Tomohiro Tsuji, Shinichiro Oguni

Description of the invention: This invention relates to a method for measuring hematopoietic stem cells to be used in hematopoietic stem cell transplantation as therapies for leukemia and lymphoma.

In this invention, hemocytes in a blood sample are caused to shrink and the nucleic acid is stained by a fluorescent dye. The number of hematopoietic stem cells can then be counted quickly and accurately based on scattered light information and fluorescence information by measuring the sample with a flow cytometer.

This invention enables to determine the appropriate time to start collecting hematopoietic stem cells from a donor and the time to finish, and greatly reduces physical burdens of the patient and the donor as well as burdens of medical staff. This invention contributes to promotion of therapies of leukemia and lymphoma through hematopoietic stem cell transplantation.

As a company winning the Minister of Education, Culture, Sports, Science and Technology Prize, Sysmex (representative: Hisashi letsugu, Chairman, President and CEO) received the Invention Implementation Achievement Award.



Hematopoietic stem cells classified by using this invention

- (2) Encouragement Prize for Invention
 - <u>Title of awarded invention: Sample Analyzer (JP Patent No. 5806902)</u>
 Winners: Yuji Wakamiya, Tomohiro Okuzaki
 Description of the invention: This invention relates to a specimen analyzing

Description of the invention: This invention relates to a specimen analyzing device that analyses a specimen using reagents.

According to this invention, a reagent amount that is used is calculated based on a daily reagent use amount, and an amount that should be replenished by a user is indicated in a visually easily recognizable manner for each reagent item, whereby the user's work of replenishing each reagent can be efficiently performed.

2 <u>Title of awarded invention: Sample processing device (JP Patent No. 5984713)</u>

Winners: Jun Inagaki, Satoshi Kimura, Shunsuke Ariyoshi, Hisashi Nakatsuka, Isamu Nishida

Description of the invention: This invention relates to a specimen processing device that processes blood, etc.

According to this invention, when a specimen processing device has been automatically activated, if a predetermined condition for operation reception is not satisfied, the device can be automatically shut down. This invention enables reduction of unnecessary power consumption and avoidance of unexpected troubles during absence of an operator.

③ <u>Title of awarded invention: Smear preparation device (JP Patent No. 6182130)</u>

Winners: Yuichiro Ohmae, Seiya Shinabe, Kosuke Sekizuka

Description of the invention: This invention relates to a smear preparation device for automatic creation of a smear preparation slide of blood, etc.

This invention includes a simple slide transport mechanism using 3-axis orthogonal arms, and thus can transport glass slides one by one. Accordingly, compared with conventional devices, the efficiency of creation of smear preparations is improved, and the time required from occurrence of an order of creation of a smear preparation to completion of the creation of the smear preparation can be shortened.