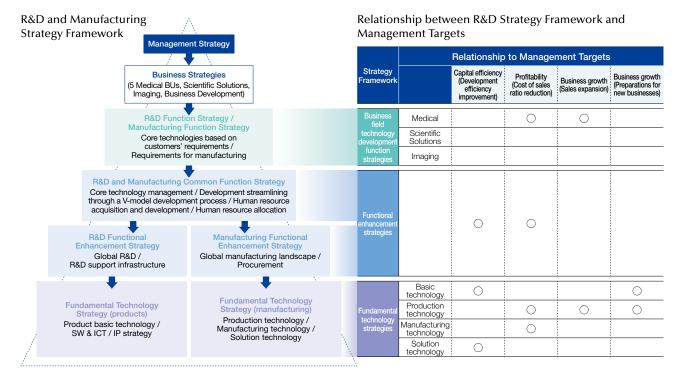
# Management Resources Supporting Our Competitive Edge

# **R&D** Activities

Product innovation at Olympus, and the eventual commercialization of all Olympus products, is rooted in the Company's policy of developing advanced technologies with the next 10 years in mind. New ideas and new technologies from Olympus lead to brighter futures for individuals and society.

# **Basic Policy**

Olympus provides value in the form of early diagnosis and minimally invasive therapies through the supply of endoscopes, microscopes, digital cameras, and other proprietarily developed products. We refer to the differentiated technologies that allow us to create such value for customers as "core technologies," and these core technologies arise from our core competencies in optical technologies, electronic imaging technologies, precision technologies, and biological-based technologies. It is the goal of the R&D Group to support Olympus in creating value that exceeds customer expectations on into the future and in constantly providing competitive products and services. We will therefore continue striving to enhance and develop new core technologies.

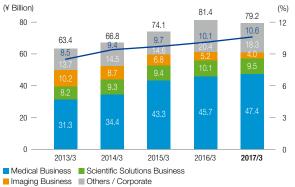


# Overview of R&D Activities

In fiscal 2017, total R&D expenditures decreased 2.7% year on year, to ¥79.2 billion, and the ratio of R&D expenditures to net sales rose 0.5 percentage point, to 10.6%. The R&D function of Olympus aims to provide technical support to the Medical Business and other businesses and to continue to evolve the Company's core technologies. We conducted more than 80%\* of R&D expenditures in the Medical Business. These expenditures were used to fund the development and subsequent launch of products including the VISERA ELITE II, a surgical endoscopy system compatible with infrared observation functions, and THUNDERBEAT Type S, a new THUNDERBEAT model that features enhanced tissue-sealing capabilities.

\* Ratio of R&D expenditures excluding Others / Corporate

# R&D Expenditures / Ratio of R&D Expenditures to Net Sales



- Ratio of R&D Expenditures to Net Sales (right)

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# Intellectual Property Activities

Olympus formulates its intellectual property strategies based on 16CSP, the medium-term management plan launched in April 2016, and is advancing intellectual property activities that facilitate its management and business activities. The following are examples of major intellectual property activities.

# **Overview of Intellectual Property Strategies**

# Management of Intellectual Properties for Core Technologies

Olympus' core technology management strategy for research and development activities categorizes core technologies linked to customer value into five technology groups based on customer workflows. The Company's core technology management practices are designed to provide balanced support for five technology groups with regard to intellectual properties. In addition to acquiring intellectual property rights for technologies developed by Olympus, we implement other initiatives for creating a strong patent portfolio, which includes incorporating technologies developed by other companies, and for securing freedom in business activities.

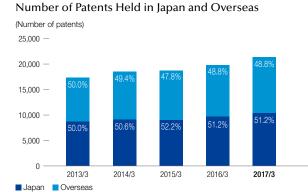
#### **Enhancement of Global Functions**

The United States is a country of critical importance to Olympus' businesses. We are therefore enhancing our global intellectual property functions with the aim of acquiring more extensive intellectual property rights and increasing our ability to respond to patent disputes in this country. In addition, we are revising our governance schemes related to coordination between the intellectual property functions of local subsidiaries to further strengthen the intellectual property activities of the entire Group and ensure swift and accurate responses to changes in the environment regarding corporate intellectual properties.

# Patent Portfolio

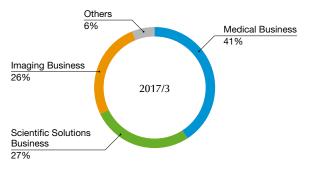
The following graphs detail the status of Olympus' patent portfolio on March 31, 2017.

In addition to deploying the aforementioned intellectual property strategies, we defined the policy of increasing the number of patents held overseas in conjunction with the globalization of Olympus' business activities. As a result of related efforts, the number of patents held overseas on March 31, 2017, was 7% higher than a year earlier. In addition, patents held overseas represented approximately 50% of the Company's total patent



portfolio, while roughly 40% of Company's patents were associated with the Medical Business. Both ratios were unchanged from the previous fiscal year. This situation was a result of our acquiring intellectual property rights that will make greater contributions to business development while also disposing of certain rights in the Medical Business for which value has been diminished. We thereby sought to create an effective and waste-free patent portfolio while maintaining upkeep fees for intellectual property rights at an appropriate level.

## Share of Patent Applications by Business Portfolio



# TOPIC

The head inventor responsible for the development of an endoscopy system that utilizes Olympus' narrow band imaging (NBI) technologies, which contributes to the early detection of cancer, was awarded the Medal with Purple Ribbon as part of the Cabinet Office's Biannual Conferment of Decorations in spring 2017. The Medal with Purple Ribbon is awarded to individuals who have contributed to academic and artistic developments. In addition, two developers responsible for the creation of a super-resolution microscope based on confocal microscopes were presented with a Prize for Science and Technology in the Development Category of the 2017 Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology.



Kazuhiro Gono (right) Medical Element Development Department 1

Shinichi Hayashi (left) Katsuyuki Abe (right) Optical System Development Department 2

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# Human Resources

Olympus views its human resources as the most important management resource to ensuring its sustained growth. We therefore respect the individuality of employees as we seek to become an organization that can furnish swift and systematic responses to changes in the operating environment.

# **Basic Policy Regarding Human Resources**

Olympus faces a rapidly changing operating environment. In order for the Company to grow and return value to society, it is crucial that all employees pursue self-growth as independent and socially minded craftspeople to become able to respond appropriately to social change. Olympus thus believes in the importance of respecting the individuality and unique skills of its employees and, trusting in their ambition and enthusiasm, accurately evaluating their achievements and providing appropriate rewards.

For this reason, we base human resource systems on merits and achievements and focus on fostering all employees while encouraging independent skill development.

### Basic Policy on Human Resource Systems

"We will maximize the value and attractiveness of work as a driving force for personal growth and organizational development."

Vision

#### Management

Management will continuously strengthen the potential of the organization by helping individual members reach their full potential through training and guidance that are centered on the value and attractiveness of work (new work philosophy).

#### Individuals

Individuals will fulfill their expected roles within the organization by achieving personal growth through work (Group philosophy).

#### Organization

The organization will build solid relationships based on trust through the sharing of a vision toward which everyone can work (shared aspirations).

# Major Initiatives

# 1. Global Human Resource Strategy and Human Resource Development

Olympus is currently formulating a global human resource strategy to facilitate efforts to realize the optimal positioning of human resources on a global scale. As part of this strategy, we have already appointed human resources from a diverse range of nationalities to such positions as executive officers and division managers at the Olympus Group's headquarters in Japan.

## 2. Promotion of Diversity

As one facet of our efforts to promote diversity in Japan, we formulated an action plan as a general business operator in accordance with the Act on Promotion of Women's Participation and Advancement in the Workplace in April 2016. Based on this plan, we have expanded the range of employees to which our telecommuting system is available, and we are

## **Emphasized Corporate Culture**

We believe creating an organization that is able to respond to change requires this organization to be capable of assembling a diverse range of people, with different nationalities, genders, upbringings, and cultures, and combining their various strengths. Accordingly, Olympus has defined five characteristics it seeks to share and encourage in all employees, both in Japan and overseas, to guide its efforts to unite diverse human resources.



become trapped within their own viewpoint but to broaden their field of vision to understand situations and make decisions from a more overarching perspective. All employees will remain ever aware of th importance of trust and adhere to high ethical standards grounded in their commitment to never repeat the same mistake (INtegrity: Integrity in Society).

In addition, Olympus has re-invented its Companywide training systems in Japan to further its efforts to cultivate globally competent human resources among domestic staff. Looking ahead, we will continue investment in human resource development aiming to optimally utilize these resources on a Groupwide basis, which will include actively appointing human resources from overseas to fill posts in Japan.

providing Work-Life Integration training for management with an eye to systematically cultivating female employees as well as management candidate cultivation training aimed at promoting female employees to management positions. In addition, the dedicated Diversity Promotion Group has been established, and we are thus working to strengthen diversity promotion systems. Overseas subsidiaries are also advancing initiatives for utilizing diverse human resources. Specific initiatives include the drive to develop a workplace environment that is more conducive to various employees working together as part of diversity and inclusion programs at our U.S. subsidiaries. These programs include encouraging the hiring and promotion of employees with diverse cultural backgrounds, taking steps to deepen employee understanding regarding other cultures, supporting employees attempting to work while raising children, and





Daycare center at U.K. subsidiary

Daycare center at U.S. subsidiary

#### 3. Promotion of Health and Productivity Management

It is Olympus' goal to foster a corporate culture in which all employees are in good physical and mental health and are filled with vitality in order to help every employee enjoy a healthier and happier life. We are therefore deploying measures to support the health improvement efforts of employees through coordination with the Health Insurance Association. In fiscal 2016, we began the "Mind and Body Vitality Project," which promotes activities with an emphasis on (1) prevention of lifestyle-related diseases, introducing systems providing flexibility in working times and locations. Meanwhile, subsidiaries in Germany are receiving consultation from a third-party specialist firm on how to assist employees seeking to balance their work with child-rearing or providing long-term care to family members. Subsidiaries in the United States and the United Kingdom have worked to address this issue by establishing daycare centers, each of which are attended by between 80 and 90 children, to offer aid to working parents.

## Performance

	2016/3	2017/3
Ratio of female managers	1.4%	1.9%
Ratio of female full-time employees	13%	14%
Ratio of female new graduate hires	19%	25%

(2) early detection of cancer, and (3) prevention of mental health disorders. In addition, overseas subsidiaries are promoting employee health through various initiatives of their own. Examples of these initiatives include early cancer detection campaigns, lifestyle disease prevention and improvement seminars, establishment of physical and mental health consultation venues, and provision of financial aid for enrollment in fitness gyms and participation in sports activities.

# **External Recognition**

#### Japan

## Inclusion in 2017 Excellent Enterprise of Health and Productivity Management - White 500 Selection

Olympus is strategically practicing health and productivity management with a constant focus on employee health management. As a result of these efforts, in February 2017 the Company was chosen for selection in the 2017 Inclusion in Excellent Enterprise of Health and Productivity Management—White 500, which is jointly compiled by the Ministry of Economy, Trade and Industry, and Nippon Kenko Kaigi, out of recognition for the excellence it has exhibited in this area. Going forward, Olympus will continue to contribute to society by creating a workplace environment that helps improve the health and vitality of employees and their families and by supporting customer health through its business activities.

#### Acquisition of "Kurumin" Certification

Olympus has continued to establish action plans based on the Act on Advancement of Measures to Support Raising Next-Generation Children through which it has advanced various initiatives, including promoting Work-Life Integration, facilitating understanding in this regard, and introducing a telecommuting system. These efforts have been recognized by the Ministry of Health, Labour and Welfare, which has designated Olympus as a "*Kurumin*" certified company.

#### Overseas

## Receipt of Two Awards by Olympus Europa

German subsidiary Olympus Europa SE & Co. KG received two awards related to healthcare during fiscal 2017. The first award was the Felix Burda Award,<sup>\*1</sup> which was presented to this company by Felix Burda Stiftung, a foundation that promotes cancer prevention healthcare programs. The second award was the No. 1 ranking in the 2017 Corporate Health Award,<sup>\*2</sup> the most prestigious corporate health award in Germany.



- \*1. Most prestigious award for colorectal cancer prevention initiatives targeting companies in Germany, Austria, Switzerland, and the Netherlands
- \*2. Award program rating companies based on criteria including overarching concept of a healthy life, ongoing health promotion activities, welfare systems, and management's commitment to health programs; in 2017, 13 organizations were awarded the No. 1 ranking from among 304 organizations in 13 categories; Olympus' program was named "Top of the Tops"

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