

Global Optogenetics Actuators and Sensors Market Size study, by Product Type (Actuators and, Sensors), By Disease Type (Retinal Disorders, Parkinson's Disease, Autism, and Others) and Regional Forecasts 2022-2029

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Abstracts

Global Optogenetics Actuators and Sensors Market is valued at approximately USD XX Billion in 2021 and is anticipated to grow with a healthy growth rate of more than XX % over the forecast period 2022-2029. Optogenetic actuators can be defined as proteins that modify the activity of the cell in which they are expressed when that cell is exposed to light. Whereas, optogenetics sensors are genetically encoded biosensors which are used to monitor the activity of neurons or other cell types by measuring fluorescence or bioluminescence. Optogenetics actuators and sensors help in understanding the functioning of brain cells along with the use of optics and genetics to control the movement of neurons. The optogenetics actuators and sensors enables the treatment of various complex diseases such as retinal diseases, Parkinson's and Alzheimer's disease. The rapid technological advancement and innovation in the field of neuroscience and rising number of neurological and mental disorders such as Parkinson's disease, and schizophrenia have led to the growing demand for optogenetics actuators and sensors.

Over the years the prevalence of neurological disorders has significantly increased, hence creating strong demand for optogenetics actuators and sensors. For instance – according to World Health Organization (WHO) estimates – as of 2019, the prevalence of Parkinson's disease (PD) has doubled in the last 25 years with global prevalence reached to 8.5 million individuals. Additionally, as per estimates during 2019, PD resulted in 5.8 million disability-adjusted life years, witnessing an increase of 81% since 2000, and caused around 329,000 deaths. Furthermore, as per Parkinson's Foundation

– as of 2020, around one million people in the U.S. were living with Parkinson's disease (PD), and this number is expected to rise to 1.2 million by 2030. Also, rising number of government initiatives and funds provided to academic institutions and researchers towards the development in the field of optogenetics would create lucrative growth prospectus for the market over the forecast period. However, high cost associated with these devices and treatment procedures impedes the market growth throughout the projected period 2022-2029.

The regional analysis of Global Optogenetics Actuators and Sensors Market is considered for the key regions such as Asia Pacific, North America, Europe, Latin America and Rest of the World. North America is expected to dominate the market share of optogenetics actuators and sensors market due to government organizations providing funds to researchers and institutions coupled with innovation and development. For instance, in March 2019, Biogen announced that it has entered into an agreement to acquire Nightstar Therapeutics, a clinical-stage gene therapy company. The acquisition will help the company to expand its product portfolio in gene-therapy programs for retinal disorders. Whereas Asia Pacific is estimated as the fastest growing region due to factors such as increase in R&D expenditure. Furthermore, collaborations among leading market players would offer lucrative opportunities for the market over the projected period.

Major market players included in this report are:

Addgene

AGTC

Cohorent, Inc.

Danaher

Elliot Scientific Ltd.

GenSight Biologics

Judges Scientific plc

Laserglow technologies

Merck KGaA

REGENXBIO Inc.

Recent Developments in the Market:

In September 2021, Novartis acquired Arctos Medical. The acquisition aimed at working towards development of treatments procedures and solutions for patients with vision loss and the potential of optogenetics as the basis of successful therapeutics.

Global Optogenetics Actuators and Sensors Market Report Scope:

Global Optogenetics Actuators and Sensors Market Size study, by Product Type (Actuators and, Sensors), By Dise...

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

Report Coverage Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered Product Type, Disease Type, Region

Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World

Customization Scope Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming eight years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within each of the regions and countries involved in the study. Furthermore, the report also caters the detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, the report shall also incorporate available opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and Material offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Product Type:

Actuators

Sensors

By Disease Type:

Retinal disorders

Parkinson's disease

Autism

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy
ROE
Asia Pacific
China
India
Japan
Australia
South Korea
RoAPAC
Latin America
Brazil
Mexico
RoLA
Rest of the World

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