



Launch of the IMPRiND Consortium to investigate how aggregated proteins contribute to the progression of Alzheimer's and Parkinson's diseases

On 1st March 2017 the Innovative Medicines Initiative (IMI) launched IMPRiND, an innovative research project that is devoted to investigate whether mechanisms of propagation of aggregated proteins between cells could enable novel therapeutic approaches in Alzheimer's and Parkinson's diseases.

Alzheimer's and Parkinson's diseases are age-related neurodegenerative disorders without cure. They are characterized by the progressive loss of brain cells often along interconnected networks. Recent evidence suggests that this progressive march of pathological lesions may be due to the release and uptake of specific aggregated proteins which act as templates for further aggregation once inside cells. However, a complete understanding of such events and the underpinning cellular mechanisms is still lacking. IMPRiND aims to fill this knowledge gap and develop tools and assays for targeting these pathways to pave the way for novel therapeutics that could delay the progression of Alzheimer's and Parkinson's disease.

In Alzheimer's disease, affected patients suffer from a progressive loss of memory whereas in Parkinson's disease the most prominent symptoms relate to slowness of movement as well as memory decline in a proportion of them. Today, over 45 million people worldwide live with dementia and up to 10million with Parkinson's disease. It is estimated that the number of patients with neurodegenerative brain diseases will increase to 131.5 million by 2050 (World Alzheimer Report 2015). The burden on caregivers who are often family members is huge. With an estimated 160 billion Euros of costs of care annually in Europe alone, this translates into a high socio-economic burden.

Dr. George Tofaris at the University of Oxford and IMPRiND project coordinator, commented: "We are seeking to understand how aggregated proteins are handled once inside brain cells and how they are passaged from cell to cell. To this end, we will work collaboratively to develop standardized tools and assays to establish disease-relevant mechanisms that could enable future therapies against disease progression in this area of unmet need".

Dr. Kenneth Thirstrup, project leader at Lundbeck A/S, stated: “By bringing together leading industrial and academic experts, this project is in an excellent position to create the knowledge and tools necessary for the development of the next innovative therapeutic interventions much needed to treat the patients”.

IMPRiND has a total budget of 11.4 million Euros. It is supported by the IMI with 4.7 million Euros, by industrial partners with 6.4 million Euros and 0.3 million Euros from the Swiss Federation. The project runs over four years and will end on 28th February 2021.

The parties involved

The IMPRiND consortium brings together pharmaceutical companies and public research organisations from across Europe.

Pharmaceutical partners are: H. Lundbeck A/S (Denmark); Janssen Pharmaceutica NV (Belgium); Novartis (Switzerland), Servier (France); Eli Lilly and Company (UK); AbbVie (Germany).

The academic institutions from across Europe include: University of Oxford (UK), University of Cambridge (UK), MRC Laboratory of Molecular Biology (UK), University of Dundee (UK), German Center for Neurodegenerative Diseases, University Medical Center Göttingen (Germany), VIB Center for the Biology of Disease (Belgium), University of Bordeaux (France), Centre National de la Recherche Scientifique (France), Aarhus Universitet (Denmark), Biomedical Research Foundation of the Academy of Athens (Greece) and the management company SCIPROM (Switzerland).

IMPRiND further embraces two non-European institutions: Harvard Medical School and Hamad Bin Khalifa University are linked to the consortium.



The IMPRiND consortium at the Kick-Off meeting at Oxford

About the Innovative Medicines Initiative

The Innovative Medicines Initiative (IMI) is working to improve health by speeding up the development of, and patient access to, the next generation of medicines, particularly in areas where there is an unmet medical or social need. It does this by facilitating collaboration between the key players involved in healthcare research, including universities, pharmaceutical companies, other companies active in healthcare research, small and medium-sized enterprises (SMEs), patient organisations, and medicines regulators. This approach has proven highly successful, and IMI projects are delivering exciting results that are helping to advance the development of urgently-needed new treatments in diverse areas.

IMI is a partnership between the European Union and the European pharmaceutical industry, represented by the European Federation of Pharmaceutical Industries and Associations (EFPIA). Through the IMI 2 programme, IMI has a budget of €3.3 billion for the period 2014-2024. Half of this comes from the EU's research and innovation programme, Horizon 2020. The other half comes from large companies, mostly from the pharmaceutical sector; these do not receive any EU funding, but contribute to the projects 'in kind', for example by contributing their researchers' time or providing access to research facilities or resources.

- » Visit the IMPRiND website at www.imprind.org
- » More info on IMI: www.imi.europa.eu
- » Follow IMPRiND on Twitter: [@IMPRiND](https://twitter.com/IMPRiND)

Contact

Project Office and General Enquires:

Dr. Kirsten Leufgen

SCIPROM Sàrl
+41216940412

Project Leader:

Dr. Kenneth Thirstrup

H. Lundbeck A/S

Project Coordinator:

Prof. George Tofaris

University of Oxford

This project receives funding from the Innovative Medicines Initiative 2 Joint Undertaking under grant agreement No 116060. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and EFPIA.

This work is also supported by the Swiss State Secretariat for Education, Research and Innovation (SERI).

