



**EUROPEAN FEDERATION
FOR MEDICINAL CHEMISTRY**

The role of medicinal chemistry in curing PD

Dr. Yves P. Auberson

EFMC President

Novartis Institutes for Biomedical Research



Advancing the science of medicinal chemistry in Europe

EFMC represents the European medicinal chemistry community

Independent association founded in 1970, representing 26 national societies from 24 countries, and over 7500 academic and industrial medicinal chemists.

- promoting **scientific exchange**
- rewarding **scientific excellence**
- facilitating **communication and networking**
- providing **training and mentoring**



An extraordinary burden to the society

- **Parkinson's disease**, Alzheimer's disease, polyneuropathies, prion diseases, motor neuron diseases, Huntington's disease, spinal muscular atrophy...

How can medicinal chemistry help?

- Provide pharmacological tools for biologists
- Optimize drug candidates for safety and efficacy.
- Provide imaging agents for diagnosis and disease monitoring

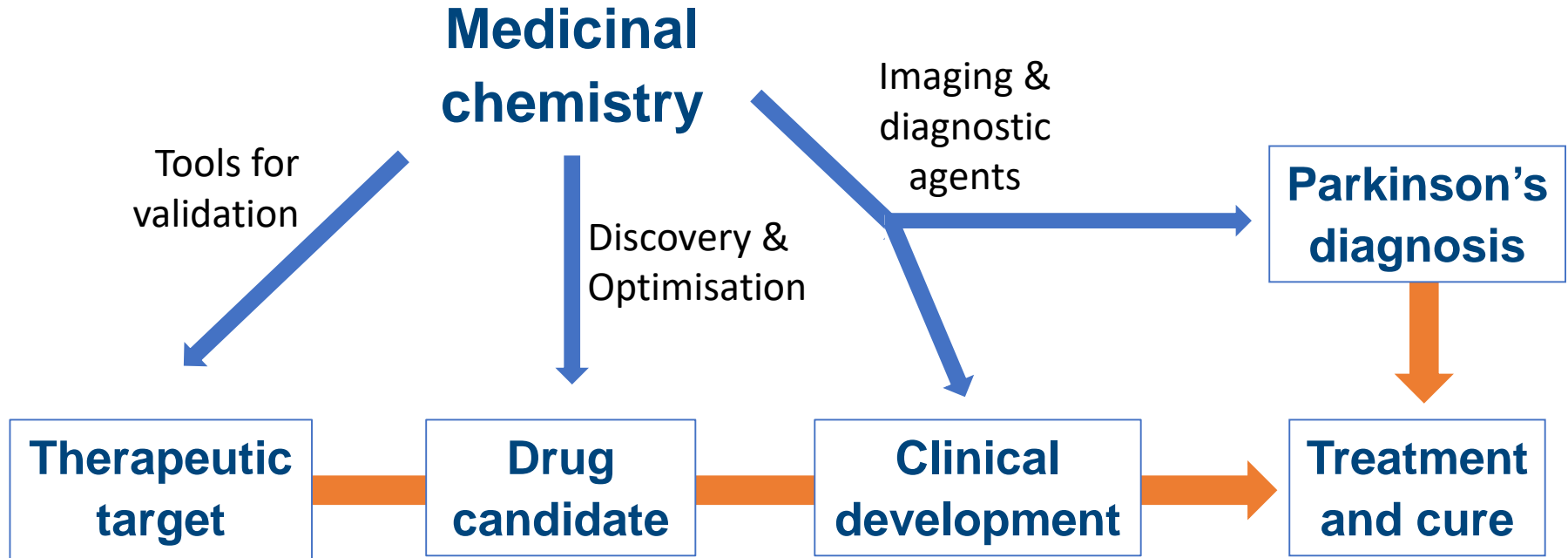


What does medicinal chemistry need to discover a drug candidate

- **A therapeutic target**
- **Predictive animal models of the cause of disease**
 - not a model of symptoms
- **High quality medicinal chemistry teams**
 - Extreme complexity of parameters to optimize.
 - No compromise on safety.
 - Profile adapted to patients needs and requirements.



Medicinal chemistry is enabling





Please remember this

- **PD and all neurodegenerative diseases are highly complex.**
- **Both academia and industry struggle with the long-term investments required - the risks are very high.**
- **The discovery and development of new drugs is challenging and expensive; medicinal chemistry is part of the solution.**
- **Public initiatives need to include medicinal chemistry in their scope. No medicinal chemistry, no drugs.**