

K4DD: Collaborative capacity building

Creating new knowledge, tools and collaborative ties while educating the future generation



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<h3>Facts & Figures</h3> <p>Start date: 01/11/2012</p> <p>End date: 31/10/2018</p> <p>IMI funding: 8 286 930 €</p> <p>EFPIA in kind: 9 831 318 €</p> <p>Other: 2 742 002 €</p> <p>Total Cost: 20 860 250 €</p> <p>Project website: www.k4dd.org</p> <p>9 Academic Partners</p> <p>4 SME's</p> <p>7 EFPIA Partners</p> <p>Education programme:</p> <p>20 K4DD fellows financed</p>	<h3>Challenge</h3> <p>While it had been increasingly appreciated that the rates at which drugs associate with and dissociate from receptors (the binding kinetics) directly impact drug efficacy and safety. The molecular determinants of drug-receptor binding kinetics remained poorly understood. The rational modulation of drug binding kinetics during lead optimization thus remained challenging.</p> <h3>Approach & Methodology</h3> <p>The K4DD aimed to develop techniques, structure-kinetic relationships (SKRs), data and models that would become accessible and useable for the drug development community which would enable reliable predictions of kinetic properties in silico. All together K4DD aimed to improve the in vitro to in vivo translation of future medicines in terms of efficacy and safety.</p>
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Results:

Creating new knowledge:

- Over 70 scientific publications
- ~5000 data points generated
- Over 200 compounds synthesized & analysed
- Online tools available
- Major Scientific close out meeting
- All data to be intergrated in ChEMBL

Creating Commercial potential:



<h3>Educating a future generation:</h3> <ul style="list-style-type: none"> - 20 K4DD fellow financed - Dedicated education programme - Cross-partner internships - Bi yearly fellow workshops - 8 PhD theses 	<p><i>"it is hard to imagine how such a broad approach can be realized outside a framework as provided by a PPP like IMI K4DD"</i></p> <p><i>"I have learned a lot through the educational programme, the focus on career perspectives brought me new insight to plan my career & to decide on the choice between industry and academia."</i></p>
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