Doctoral programme in Drug research (DPDR) in the University of Helsinki and in FinPharmaNet

Ilkka Reenilä

Doctoral Programme Coordinator

*Doctoral programme in Drug research (DPDR)*

*Doctoral programme in Clinical Veterinary Medicine (CVM)*

*FinPharmaNet*
Doctoral education in the University of Helsinki

2014 ‡ All Doctoral students belong to one of the Doctoral Programmes in UH (and in other Finnish Universities)

<table>
<thead>
<tr>
<th>1&lt;sup&gt;st&lt;/sup&gt; – 3&lt;sup&gt;rd&lt;/sup&gt; year, annually</th>
<th>4&lt;sup&gt;th&lt;/sup&gt; year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research, courses - mobility - thesis committee meeting - annual report</td>
<td>Research, courses - mobility - thesis committee meeting - annual report - thesis writing – dissertation - PhD degree</td>
</tr>
</tbody>
</table>

- Scientific and transferable skills **courses** (20-60 ECTS)
- **Travel** support for congresses, courses, visits in other research groups
- Follow-up **meetings ‡ reports** of progress in training (update of plans)
Doctoral school in health sciences (DSHS, 1 out of 4 Doctoral schools in UH):

Doctoral candidates (N= 1423) and UH funded positions (n=103) in DSHS Doctoral programmes (12.1.2016)
# Doctoral Programme in Drug Research (DPDR): units & members

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Principal investigators</th>
<th>Doctoral students (3.2.2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Pharmacy (host faculty)</td>
<td>50</td>
<td>164</td>
</tr>
<tr>
<td>Faculty of Medicine (Medicum):</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>- Clinical pharmacology</td>
<td></td>
<td></td>
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<tr>
<td>- Pharmacology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute of Biotechnology, Neuroscience Center, FIMM (and other organisations)</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Faculties of Veterinary Medicine, Science, Agriculture and Forestry, Industry, Fimea, NIH, pharmacies</td>
<td>15</td>
<td>0</td>
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</tbody>
</table>

- About 15 theses/year (2014-2015: 12 and 15/year)
  (DSHS: 1400 students, 175 theses/year)
**DPDR (and FinPharmaNet) disciplines and topics:**

*Life cycle of medicines and toxicology*

<table>
<thead>
<tr>
<th>DPDR</th>
<th>Preclinical</th>
<th>Clinical: phases I, II &amp; III</th>
<th>Postmarket</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lead drug identification</td>
<td>Biochemical screening</td>
<td>Industrial production</td>
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<tr>
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<td>Chemical screening</td>
<td>Drug formulation</td>
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<td></td>
<td>Drug delivery</td>
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<tr>
<td></td>
<td></td>
<td>Efficacy, safety, interactions</td>
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<td></td>
<td></td>
<td>Drug toxicology</td>
<td></td>
</tr>
</tbody>
</table>

**Disciplines:**
- Pharmaceutical chemistry
- Pharmaceutical technology
- Clinical pharmacology
- Analytic biopharmacy
- Pharmaceutical biology
- Biotechnology
- Industrial pharmacy
- Pharmacoeconomics
- Pharmacogenomics, pharmacogenetics
- Clinical pharmacy
- Veterinary medicine

**Doctoral training aiming to achieve experts having wide view of drugs and toxicology**

Ilkka Reenilä©
National collaboration: FinPharmaNet

WWW.FPDP.FI

- Funded by Academy of Finland (1998-)
  - 2006: FinPharmaNet
  - 2012-2015: FPDP
  - 2016 † FinPharmaNet

- Board: Director, representatives from DPDR/DRDP and other Universities, drug industry (Orion) and authorities (Fimea). And?

- Previous Sections and core Universities:

<table>
<thead>
<tr>
<th>FPDP Pharmacy: Helsinki, Kuopio</th>
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<tbody>
<tr>
<td>FPDP Clinical drug research: Helsinki, Turku, Tampere, Oulu, Kuopio</td>
</tr>
<tr>
<td>FPDP Drug discovery: Turku, Helsinki, Kuopio, Tampere, Oulu, Jyväskylä, Åbo akademi</td>
</tr>
<tr>
<td>FPDP toxicology: Kuopio, Oulu, Tampere (Helsinki)</td>
</tr>
</tbody>
</table>
Courses and events in drug research and toxicology 2015

FinPharmaNet/FinPharma Doctoral program course page (http://fpdp.fi/?s=2-courses):

Kliininen lääketutkimus, 17.-18.11.2015, Helsinki

Neuropharmacology of drug addictions, 6.-7.10.2015, Helsinki

Prof. Raimo K. Tuominen 60 years Symposium, 28.8.2015, University of Helsinki

Emerging targets and molecules in middle space – FinMedChem 2015, Synthetic Chemistry 2015, 12 th FIPS, 24.–27.8.2015, Helsinki

Summer school on medication safety research, 19.-20.8.2015, University of Helsinki


Reprogramming of cell fate, 22.6.2015, Helsinki

Nanotechnology and microfluidics (for pharmaceutical applications), 25.5-5.6.2015, Helsinki

Outcomes Assessment, Rational Drug Therapy and Pharmacy 6.-7.5.2015, Helsinki

Helsinki Spring course on Parkinson’s disease, 4.-5.5.2015, Helsinki

Eläinlääkkeiden kehityksen ja käytön erityispiirteet/Special characteristics of use and development of veterinary medicines, 26.-27.3 ja 23.-24.4.2015.

PHARMACOLOGY & TOXICOLOGY JOINT MEETING 2015 & BCPT NORDIC PRIZE 2014 CEREMONY Herbal products – pharmacology, clinical pharmacology and toxicity, 23.-24.4.2015 Helsinki
Organizers: Finnish Pharmacological Society, Finnish Society of Clinical Pharmacology, Finnish Society of Toxicology, Doctoral programmes

Microbial lifestyles and drug discovery of antimicrobials, 23.3.–24.4.2015, Helsinki

Measuring effectiveness in health care research/Vaikuttavuuden mittaaminen, 17.2.-5.3.2015, Helsinki

Lääketaloustieteen tutkimusmenetelmät, 17.3.-15.4.2015, Helsinki

Tutkimustiedon kriittinen arviointi, 19.1.-5.2.2015, Helsinki
Doctoral education in drug research and toxicology

National FinPharmaNet/FinPharma Doctoral program:
www.fpdp.fi, Coordinators:
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University of Helsinki, Coordinator: Ilkka.reenila@helsinki.fi
Doctoral programme in drug research (DPDR)
http://blogs.helsinki.fi/reenila/
Doctoral programme in Clinical Veterinary Medicine (CVM)
http://blogs.helsinki.fi/aniwel-graduate-school/