



Meeting: Training Course 4 (TC4) – Assessing human health and lifestyle by sewage epidemiology
Dates: 17th-18th September 2014
Location: Istituto di Ricerche Farmacologiche Mario Negri, Via La Masa 19 – 20156, Milano, Italy

Day 1 Molecular toxicology and human pharmacokinetics (including substance misuse)

8:45-9:00	<i>Registration and Welcome</i>
9:00-9:10	Introduction (Sara Castiglioni)
9:10-9:40	Latest trends and developments in Europe's drug situation and responses [J. Mounteney (EMCDDA)]
9:40-10:10	The pharmacology and pharmacokinetics of prescription drugs with abuse potential [J.G. Bramness (UiO)]
10:10-11:10	Pharmacokinetics of drugs of abuse and new tools to perform studies on metabolism [Markus Meyer (USAAR)]
11:10-11:40	<i>Coffee break</i>
11:40-12:10	Importance of enantiomeric profiling of chiral drugs in sewage epidemiology and pharmacokinetic relevance [B. K-Hordern (UoB)].
12:10-12:30	The pharmaco-epidemiology of prescription drugs with abuse potential [J.G. Bramness (UiO)]
12:30-13:00	Current approaches for estimating the number of inhabitants served by a sewage treatment plant and population dynamics [Christoph Ort (EAWAG)]
13:00-14:00	<i>Lunch</i>
14:00-14:30	Drug abuse and long-lasting neuroplastic changes [L. Cervo, MARIO NEGRI]
14:30-15:00	Prediction of potential environmental contaminants from human pharmacokinetics studies [S. Castiglioni (MARIO NEGRI)]
15:00-18:00	Visit to Milano Nosedo Sewage Treatment Plant

20:00

Dinner (venue tbc)



Day 2 Epidemiology (key topics: pharmaco-epidemiology, sewage epidemiology)

9:00-9:15	<i>Registration and Welcome</i>
9:15-9:45	Sewage epidemiology approach: potentials, limitations and ethical issues [E. Zuccato (MARIO NEGRI)]
9:45-10:45	Uses of wastewater testing for drug epidemiology and public health interventions [C. Banta-Green (UW)]
10:45-11:15	Practical application of sewage epidemiology to estimate drug consumption at community level [S. Castiglioni (MARIO NEGRI)]
11:15-11:45	<i>Coffee break</i>
11:45-12.15	Sewage epidemiology application to monitor alcohol consumption in a community [K. Thomas, Malcolm Reid (NIVA)]
12:15-12:45	Steroids in urban wastewater as markers of abuse [R. Bagnati (MARIO NEGRI)]
12:45-14:00	<i>Lunch</i>
14:00-15:30	Group activity. Direct application of sewage epidemiology - case studies [S. Castiglioni & E. Zuccato (MARIO NEGRI)].
15:30	Close and departure
15:30-18:00	SEWPROF ESR&ER meeting (room available for discussion).