PRELIMINARY AGENDA

Monday 22nd July 2019

09:00 Registration & Coffee

09:15 Welcome:
Objectives and overview of the agenda
Lecturer and participant introductions

09:30 Lecture:
Where to apply histopathology in fish toxicology (mechanistic studies, regulatory arena, monitoring), and which organs to study? (Helmut Segner)

09:45 Lecture:
Technical aspects of histology: from the fish to the slide (Lisa Baumann)

10:00 Lecture:
Fixation and preparation methods (Thomas Braunbeck, Stephen Feist)

10:30 Lecture:
Why are histological sections so colorful? Principles of staining (Heike Schmidt-Posthaus, Helmut Segner)

11:00 Coffee break

11:15 Lecture and demonstration:
Normal anatomy and histology of fish, rainbow trout, zebrafish, medaka, fathead minnow, adult versus early life stages (tbd)

12:30 LUNCH

13:30 Guided exercise:
Normal anatomy and histology of fish (rainbow trout, zebrafish, medaka, fathead minnow, adult *versus* early life stages (lead Jeff Wolf, under participation of all)

15:00 Coffee break

15:15 Lecture
Mis-diagnoses and missed diagnoses – the challenges in toxicologic pathology with fish (Jeff Wolf)

15:45 Guided exercise:
Comparison of normal and altered tissue structures (all)

17:15 Supervised self-study
Use of "tissue identification checklist"

18:00 END, walk to dinner in the old town of Heidelberg

Tuesday 23rd July 2019

08:30 Lecture:
Semiquantitative grading of histopathological lesions (Heike Schmidt-Posthaus, Thomas Wahli)

09:00 Lecture:
Quantitative pathology (Jeff Wolf)

09:30 Lecture:
Regulatory applications: Histopathology of endocrine disruptors (Lisa Baumann, Helmut Segner)

10:00 Lecture
Histopathology of estrogen disruptors: a case study with fathead minnow (Stephen Feist)

10:30 Coffee break

10:45 Guided exercise:
Fish gonad histopathology (all)

12:30 LUNCH
13:30 Lecture:
Applications in toxicity studies with early life stages of fish (Thomas Braunbeck)

14:15 Lecture:
Applications in environmental monitoring (Stephen Feist)

14:30 Lecture:
Neoplastic changes in fish tissues (Heike Schmidt-Posthaus)

14:45 Lecture:
BEQUALM fish disease measurement programme (Stephen Feist)

15:15 Coffee break

15:30 Practical exercises BEQUALM ring test, Neoplastic changes (Stephen Feist)

16:30 Supervised self-studies/slides of the participants

17:15 Overview of course, feedback and proposals for 2020

17:30 END