POSTGRADUATE MEDICAL TRAINING

FMH Medical Genetics

at the

Division of Medical Genetics,
Department of Genetic Medicine and Development, University of Geneva and
Department of Obstetrics and Gynecology, Hôpital Universitaire de Genève (HUG)

Head of the Division: Prof. Dr. med. Stylianos E. Antonarakis, Professeur ordinaire de la Faculté de Médecine à Genève, FMH for Medical Genetics, FAMH for Medical Genetics

Clinical substitute: Dr. med. Armand Bottani, FMH for Medical Genetics

Consultants: Dr. med. Siv Fokstuen, FMH for Medical Genetics; PD Dr. med. Pierre Chappuis, FMH for Internal Medicine and Oncology, Privat-Docent de la Faculté de Médecine à Genève; Dr.med. Sophie Dahoun, FAMH for Medical genetics

Cytogenetic diagnostic laboratory: Dr.med. Sophie Dahoun, FAMH Medical Genetics

Molecular diagnostic laboratory: Dr. Mike Morris, FAMH Medical genetics

Molecular cytogenetic laboratory: Dr. Frédérique Bena

Medical oncogenetic laboratory: Dr. Jean-Louis Blouin; Dr. Pierre Hutter, FAMH Medical genetics

Number of supervisors: 5

Actual number of trainees: 3

(1) Postgraduate Medical training for the FMH Medical genetics

(A) Description of the postgraduate training centre

Genetic Medicine in Geneva was first developed in the late 40’s because of the foresight and vision of Professor A. Franchescetti who, working in Ophthalmology, realized the existence of numerous hereditary conditions that manifest eye phenotypes. The first Professor of Medical Genetics was David Klein who greatly contributed to the clinical description of mendelian disorders and developed the branch of clinical genetics. His successor Professor Eric Engel put additional emphasis in cytogenetics and developed excellent laboratories facilities. The current head, Professor Stylianos E. Antonarakis emphasized molecular genetics and focused on the genome analysis, molecular diagnostics, and the molecular basis of monogenic and complex phenotypes. Recently Medical Genetics in Geneva has been renamed to Genetic Medicine to emphasize the importance of genetic variation
to phenotypic variation. The current structure is affiliated to both the University of Geneva Medical School, and the University Hospital of Geneva. The activities of Genetic Medicine, i.e. Clinical services, Diagnostic laboratories, and Research laboratories are under the auspices of two departments, that of Genetic Medicine and Development, and Obstetrics and Gynecology. The whole Genetics Medicine consists of approximately 65 individuals with main goals of patient care, research and teaching. The funding of the activities comes from the Canton of Geneva, numerous National and International foundations including the Swiss National Science Foundation, the European Union, the American NIH, and donations from private Foundations.

(B) Organisation of the Division of Medical Genetics in Geneva:

1. **Clinical unit** (genetic counselling and diagnostics in nearly all medical specialties; special emphasis: dysmorphologie, syndromatology, fetal medecine, cardiogenetics, oncogenetics)

2. **Medical genetics diagnostic laboratories**
   - Classical Cytogenetic (pre- and postnatal), FISH, CGH, QF-PCR,
   - molecular diagnosis (pre- and postnatal), cell culture

3. **Research group (Department of Genetic Medecine and Development)**

The clinical unit covers referrals from the whole canton of Geneva as well as some referrals from France and other cantons. In addition Dr. A. Bottani consults once a month to „l'hôpital cantonal de Sion, Valais“.

(C) Specialised consultations within the University Hospital of Geneva (HUG):

- **In Pediatrics** (Neuro-pediatrics, Pediatric orthopedia, Unit of child development)
- **In Gynecology and Obstetrics** (Fetal Medecine, Infertility clinic)
- **In Oncologie: Unité des prédispositions génétique au cancer** (Head: PD Dr. P. Chappuis)
- **In Cardiology**: Cardio-genetic consultation
- **In Endocrinology**: Genetic consultation for Multiple Neoplasia syndromes I and II, von Hippel Lindau syndrome

Apart from these specialised consultations we have referrals from nearly all medical specialities of the HUG: neurology, ophthalmology, ENT, surgery, dermatology, psychiatry.

(D) **Statistics** (see attached file)

(E) **Postgraduate training for FMH Medical Genetics**

We usually employ trainees for 2 years and encourage them to spend the third year in another institut of medical genetics. Because there are actually 5 supervisors for 3 trainees the coaching is ideal.

Mandatory during the two years of postgraduate training:

- **Active participation to all genetic consultations and clinical staff meetings** (see attached file: plan of the week)
- **Rotation of 3 months in the cytogenetic diagnostic laboratory**
• Rotation of 3 months in the molecular diagnostic laboratory
• Rotation of 6 months in the „unité des prédispositions génétiques au cancer“
• Regular postgraduate training seminars in collaboration with the Division of Medical Genetics in Lausanne (once a month)
• Clinical Journal Club of the Division of Medical Genetics (twice a month with active participation twice a year)
• „Réunion Vaud / Genève“ (3-4x/year with regular active participation)
• „Consensus oncogénétique“ (once a month with active participation)
• „Colloque médecine fétale“ (once a months)
• Journal Club du Département Gynécologie et Obstétrique (3x/year with active participation once a year)
• „Colloque syndrome du mois“ in pediatrics (once a month)
• „Swiss dysmorphology meeting“ (2-3x/year with regular active participation)
• Participation at the annual meeting of the Swiss Society of Medical Genetics
• Once a year participation to an international congres or postgraduate training course of Medical genetics (financed by the HUG)

<table>
<thead>
<tr>
<th>Facultative:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Club of the Departement of Genetics and Development (1x/week)</td>
</tr>
<tr>
<td>Obstetrics and Gynecology: Jeudi académique du Département Gynécologie/Obstétrique (1x/week)</td>
</tr>
<tr>
<td>Pediatrics: „Colloque Formation Pédiatrie“ (1x/month)</td>
</tr>
<tr>
<td>„Formation général des HUG pour les médecins internes de toute formations“ (selon annonce)</td>
</tr>
<tr>
<td>According to the personnel interest of the assistant</td>
</tr>
</tbody>
</table>

(F) Educational materials

• Own library at the Division of Medical Genetics with all relevant journals in Medical genetics and access to the main library of the faculty of Medecine in the same building
• Updated books and databases (POSSUM, Winter-Baraitser) in the medical office
• Internet-access with free download possibility for nearly all medical journals at each working place

(G) Evaluation of the trainees

The consultants plan regular evaluation (at least twice a year) of the trainees and support their individual carrier planning. In addition the trainees get at the end of their postgraduate training programme an official FMH certificat evaluation.

(2) Postgraduate Medical training for another FMH speciality

One of the actual 3 postgraduate trainee positions is usually occupied by an assistant who is in his/her postgraduate training of another FMH title than Medical Genetics. Specialities that are often represented are: pediatrics and psychiatry