Resistance testing is meanwhile „standard of care“ Different projects such as AREVIR, the „Verbundprojekt Monitoring von resistenten HIV mit RESINA und der RKI Serokonverter-Analyse“ contribute to better interpretation systems and analyze the risk of transmission of resistant HIV in Germany. The successful disciplinary work between clinicians, virologists and bioinformaticians started in 1999 and was honoured with the Heinz Ansmann Price 2010 for Thomas Lengauer, Mark Oette and Rolf Kaiser. On a European level the results of AREVIR and RESINA are integrated into the EUResist project together with the Karolinska and ARCA data and recently other European partners (www.euresist.org ). Our aim is the prediction of the most likely best working drug combinations. For that reason, geno2pheno-THEO (www.genafor.org) was developed and meanwhile integrated into the EUResist prediction tool which is also freely available via internet. Nevertheless we need to understand the contribution of each resistance associated mutation and we have to agree on strategies for resistance testing and interpretation. These are the aims of HIV-GRADE (www.hiv-grade.de).

New drugs in new classes require equivalent diagnostics. Within HIV-GRADE and geno2pheno such new interpretation tools have been developed. This includes the prediction of the co receptor usage prior to therapy with co receptor blockers like maraviroc and resistance to integrase inhibitors like raltegravir.

For HBV the technical expertise from the HIV-projects could be adapted, so that interpretation systems are already available. Geno2pheno and HIV-GRADE predict resistance, (sub-) genotype and escape mutants. In the near future we will have to deal with resistance to anti-HCV drugs therefore an need appropriate tool was developed.

Since 2000 the meeting is an exchange platform for clinicians, bioinformaticians and virologists. Participants have the chance to discuss clinical cases with other experts – the fasta file of the relevant case from HIV or HBV and clinical information is needed, while the interpretation systems can be utilized online at the meeting. The suppliers of the commercial systems will also be present. Furthermore, protocols are available at the meeting and will be visible on the internet after the meeting under www.genafor.org.

The language of the meeting is English.
09:00 - 09:15 Opening Comments U. B. Kaup / Stiftung caesar

09:15 - 10:45 **Hepatitis B**

**Chairs:** Ulrike Protzer, Dieter Häussinger

- HBV: therapy updates
- HBV: Resistance testing, Determination of Genotype Escape-Variants

**Speakers:** Bastian Beggel, Florian van Bömmel, Wolfram Gerlich

10:45 – 11:00 Coffee break

11:00 – 12:15 **Hepatitis C**

**Chairs:** Tobias Goeser / Herbert Pfister

- HCV: Basics
- HCV: new drugs
- HCV: Resistance testing

**Speakers:** Ralf Bartenschlager, Sven Eric Schelhorn, Anna Marie Sirkorski, Markus Lenz

12:15 – 13:30 **Coreceptor**

**Chairs:** Thomas Klimkeit, Nadine Lübke

**Speakers:** Valentina Svicher, Alexander Thielen, Nico Dybowski, Björn Jensen

13:30 – 14:30 Lunch

14:30 – 15:15 **HIV**

**Chair:** Rolf Kaiser

- Is resistance disappearing?

**Speaker:** Andrea De Luca

15:15 – 15:30 Coffee break

15:30 – 17:30 **HIV – Low viral load**

**Chairs:** Lutz Gürtler, Hans Jürgen Stellbrink

- Qiagen, Roche, Siemens and Abbott assays presented
- Presentation low viral load assays
- Clinical case
- Guided panel discussion

**Speakers:** Anna Maria Geretti, Tom Doyle, Stefan Esser, HIV Grade

17:30 – 18:30 **Basics science**

**Chairs:** Susanna Trapp, Sandra Müller

**Speakers:** Evrim Anadol, Renate König, Carsten Münk
Friday, 06.05.2011

9:00 – 10:00  **Databases and projects**

**Chairs:**  Mark Oette, Eugen Schülter

**ESAR (Eu-Network)**
**RKI-CLINSERV/seroconverter study**
**Data from the RESINA cohort**
**Kompetenznetz**

**Speakers:**  Annemarie Wensing, Claudia Kücherer, Barbara Bartmeyer, Stefan Reuter, Klaus Jansen (angefragt)

10:00 – 12:00  **Workshop**

**Protocols, interpretation, clinical application**

1.) **Coreceptor**
   Martin Obermeier, Alexander Thielen, Ramona Pauli

2.) **HBV**
   Andreas Erhardt, Jens Verheyen, Bastian Beggel

3.) **HCV**
   Saleta Sierra-Aragon, Christoph Boesecke, Sven Eric Schelhorn

12:00 – 12:30  **Summary workshops**

12:30 – 13:30  **New sequencing technologies replacing Sanger seq?**

**Chairs:**  Hauke Walter, Alexander Thielen

**Speaker:**  Martin Däumer

13:30 – 14:30  **Lunch**

14:30 – 18:00  **EuResist present and future:**

**Chairs:**  Maurizio Zazzi, Francesca Incardona

**Bioinformatics perspectives**

**Speaker:**  Thomas Lengauer

**Therapy-Naïve-Tools**
**Prediction based on therapy history**
**HIV - Infcare**
**HIV resistance, treatment perspectives and data collection in Russia, Tanzania, Vietnam, Kenya, Ethiopia, India**

**Speakers:**  Alejandro Pironi, Mattia Prosperi, Andres Sonnerborg, Dmitry Kuevda (Russia), Mloka (Tanzania), Kyong (Vietnam), Mwau (Kenya), Wondwosen (Ethiopia), Kumarasamy (India)

18:00  **Summary**

Rolf Kaiser
The Meeting is kindly supported by:

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The Meeting is organised by genafor e.V.

Organising committee:

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