SWGDRUG Meeting Minutes Phoenix, AZ January 10-12, 2012

Core Committee Members (present):

Scott R. Oulton, Chair, Drug Enforcement Administration

Sandra E. Rodriguez-Cruz, Secretariat, Drug Enforcement Administration

Suzanne Bell, West Virginia University

Michael Bovens, European Network of Forensic Science Institutes

Sylvia Burns, Private Forensic Consultant, England

Conor Crean, United Nations Office on Drugs and Crime

Garth Glassburg, American Society of Crime Laboratory Directors

Linda Jackson, Mid-Atlantic Association of Forensic Scientists

Richard Laing, Health Canada

Adriano Maldaner, Iberoamerican Academy of Criminalistics and Forensic Studies

Jerry Massetti, Northwestern Association of Forensic Scientists & CA Association of Criminalists

Jack Mario, Northeastern Association of Forensic Scientists & American Society for Testing Materials

Christian Matchett, Southern Association of Forensic Scientists

Richard Paulas, Midwestern Association of Forensic Scientists

Karen Phinney, National Institute of Standards and Technology

Catherine Quinn, Victoria Forensic Science Centre, Australia

Pamela Reynolds, Federal Bureau of Investigation

Scott Vajdos, Southwestern Association of Forensic Scientists

Angeline Yap Tiong Whei, Asian Forensic Sciences Network

Udo Zerell, Bundeskriminalamt, Germany

Core Committee Members (not present):

Robert Powers, Connecticut Department of Public Safety Eric Person, California State University, Fresno Iphigenia Naidis, United Nations Office on Drugs and Crime

Guests:

Laurel Farrell, American Society of Crime Laboratory Directors/Laboratory Accreditation Board John Paul Jones, National Institute of Standards and Technology Jill Head, Note Taker, Drug Enforcement Administration

TUESDAY, JANUARY 10, 2012

Welcome/Introduction of Meeting Guests/Review of Conference Agenda

SWGDRUG chair Scott Oulton opened the meeting by welcoming the committee members. Mr. Oulton explained that as the SWGDRUG meeting funds come from the Drug Enforcement Administration (DEA), the economic situation in the federal government requires that costs be kept low for the meeting to get approval. Mr. Oulton stated that Nelson Santos, former Chair, wishes the group well.

Mr. Oulton also introduced invited guests Laurel Farrell (Assessor from ASCLD/LAB), John Paul Jones (NIST), and Jill Head (note taker).

Denver Hearing Summary

Mr. Oulton discussed a recent Rule 702 hearing in Denver which involved a DEA case. Mr. Oulton provided testimony in the case based on science and as the SWGDRUG chair.

SWGDRUG Survey Status

Mr. Oulton explained that although the governmental process of getting surveys approved for public dissemination is time-consuming, he was willing to do so since it is important to assess the effectiveness of recommendations. Suzanne Bell offered that West Virginia University would be able to do research so the survey can be reviewed from an educational point of view. Ms. Bell indicated she would start the project and provide feedback to SWGDRUG members.

SWGDRUG MS Library Update

Mr. Oulton stated that Jason Bordelon is continuing to update the SWGDRUG mass spectral library and thanked Angeline Yap Tiong Whei for formatting the spectral data to Shimadzu format. Mr. Oulton informed the committee that he is receiving lots of positive feedback on the library and discussed the new Emerging Trends Program at the DEA's Special Testing and Research Laboratory where they are in a proactive state to identify new synthetic drugs.

Mr. Oulton described a ½ day workshop on SD-3 that Suzanne Bell, Linda Jackson, Sandra Rodriguez-Cruz and himself will be conducting at the next American Academy of Forensic Sciences Meeting in Atlanta. The workshop will be a SWGDRUG product.

Core Committee Members Responsibilities

Mr. Oulton emphasized the importance of each committee member and reminded them of their responsibility to represent and provide feedback to their respective organizations

about SWGDRUG products. Mr. Oulton gave a brief overview of the meeting agenda and said the focus topics for the meeting are to complete the quantitative uncertainty document (SD-4) and the reporting examples document.

Standardized SWG Bylaws

Mr. Oulton informed the committee that upcoming scientific working group (SWG) bylaws may be standardized for all SWG groups, but these documents are still in the draft stage. Mr. Oulton discussed the possibility that term limits may be implemented for committee members, but he also emphasized the importance of keeping the wealth of information that long term members can provide. Among the upcoming possible changes, Mr. Oulton mentioned the creation of a vice chair position and stated that SWGDRUG should begin evaluating its bylaws.

Uncertainty Sub-committee Update

Suzanne Bell updated the committee on the status of SD-4. Three examples of quantitative uncertainty calculations have been written to be included in the document. The document will be provided to the committee for review.

Education and Training Sub-committee Update

Richard Paulas stated that the training wiki webpage will not continue since so much information is already on Wikipedia. Mr. Paulas presented a new approach to the website which would identify core competencies expected from analysts after training. Such competencies could include the following topics, among others:

- Mathematics and Statistics
 General Chemistry Background
- Basic Lab Skills
- Solubility and Extractions
- Spectrophotometry
- Microscopy
- Chromatography
- Mass Spectrometry
- Chemical Characterization
- Court Testimony

Michael Bovens stated that the ENFSI training document draft has been completed and the final version should be complete by the next SWGDRUG meeting. The document will be posted on the ENFSI website. Several suggestions were made for the SWGDRUG training recommendations including posting example exams to check competencies, organizing training by drug type and cross-referencing training with the ENFSI training manual.

Reporting Sub-committee Update/Direction

Linda Jackson updated the committee on the progress of the example reports that have been developed to illustrate the SWGDRUG reporting recommendations. Six examples have been received from sub-committee chair Robert Powers, and they will be revised and provided to the committee for review.

ENFSI/DWG Update

Michael Bovens provided the committee with an update of the ENFSI training manual. Dr. Bovens stated that the quantitative sampling project is still ongoing and will be funded by the European Union (EU). The project can officially begin to develop guidelines for a sampling plan supported by software which will be used to determine the samples to be selected. At the end of the project, the software will be made available to the public.

Dr. Bovens discussed that the goal of the ENFSI Competence Assurance Project is to establish and require training to certify chemists on an individual level. There has been an intensive and controversial discussion on this topic within ENFSI. A majority of the laboratories consider the criteria under ISO 17025 regarding competence of its personnel performing the validated methods as absolutely and unambiguously sufficient. Other laboratories require an additional and individual assessment to demonstrate that their personnel are competent to perform its methods by an individual and repetitive certification process.

There was discussion on requirements of competency tests and the issue that was raised in the NAS report regarding certifications. Catherine Quinn stated that a completion of training certificate should clearly state what a chemist is trained and authorized to do.

Dr. Bovens informed the committee that the working groups in the EU are active in the forensic community and have already introduced actions and tools to demonstrate their competence.

SWGDRUG Library Retention Index Data Update / Direction

Angeline Yap Tiong Whei presented Kovat's retention index (RI) data that she and Scott Vajdos compiled for 30 drug samples. Ms. Yap Tiong Whei discussed adding retention index data to the SWGDRUG MS library to assist laboratories with the identification of unknowns when they have difficulty obtaining standards. The data showed consistency between three laboratories. 100% of the 30 samples had RI differences of less than 2% when all samples were analyzed by a HP-1 column of the same column length. Columns of different lengths had slightly higher differences, but 100% of the 30 samples also had differences of less than 2%. The macro used to calculate the RI values were developed by Oklahoma State Bureau of Investigation (OSBI). Kevin Kramer of OSBI has been incredibly helpful and is willing to provide this macro which can calculate the RI and the percent match compared to a standard. Mr. Oulton stated that DEA's Special Testing and Research Laboratory may be able to assist with generating data for new synthetic drugs on HP-1, HP-5 and RTX-35 columns to assist laboratories with identifying new drugs in the absence of a standard.

Scientific Working Group: Organizational Analysis

John Paul Jones delivered a presentation which was an overview of SWG's and the 15 meetings he has attended (out of 19 total). Mr. Jones stated that the purpose of a SWG is to recommend

minimum standards for forensic examination and that there are different organizational structures due to the lack of a coordinating group. The Criminal Justice and Forensic Science Reform Act is a bill which proposes a committee to coordinate the SWG's, however there has not been any movement on the bill.

ASTM Update

Mr. Oulton stated that the Clan Lab document was submitted to ASTM and the comments are due back on Friday, January 13th.

Jack Mario updated the committee on the feedback received from ASTM regarding definitions for the terms bias and linearity. ASTM recommended that SWGDRUG update the definition of bias to remove the phrase "expectation of test results". The committee agreed that this phrase should be removed. Mr. Mario proposed the use of the VIM definition "component of measurement error that in replicate measurements remains constant or varies in a predictable manner". Discussion of the definition will continue in the Glossary Sub-committee. ASTM also commented that the definition for linearity should include a statement that the relationship is "directly proportional" instead of "proportional". The committee discussed the possibility of curvi-linear relationships and agreed that the definition will not be changed.

Reporting Sub-committee Update

Linda Jackson discussed the phrasing of Section 5.1 from Part IVC of the main document regarding the reporting of uncertainty. Ms. Jackson discussed the upcoming ASCLD/LAB requirements for reporting uncertainty and recommended that "should" be changed to "shall" in anticipation of the new requirements. Ms. Jackson also proposed that Section 5.1 be removed from the main document and reference be made to SD-5 (Reporting Examples).

Verification of Reference Materials

Sylvia Burns discussed a question that was submitted by LGC (designated as UK National Measurement Institute) in which they proposed that standards received from accredited laboratories should be accepted at face value without having to be verified. Dr. Burns led a discussion on whether verification of standards should be required by laboratories, if authentication should be performed on each new lot of a standard, and if authentication and verification only apply to standards used for quantitation. The committee also discussed whether two category A tests used for identification must be uncorrelated and which techniques are considered uncorrelated. Mr. Oulton created a new sub-committee chaired by Dr. Burns to address SWGDRUG recommendations regarding verification of reference materials.

Sub-committee Break Out

The core committee members broke out into their respective sub-committees for the remainder of the day.

WEDNESDAY, JANUARY 11, 2012

The core committee broke into subcommittee meetings for the majority of the day.

In the afternoon, Linda Jackson led the committee in a review of proposed editorial changes to SWGDRUG documents. The proposed changes also included clarification of the term "uncorrelated techniques" and a statement in Part II, Section 4 to endorse and recommend ENFSI's Outline of Training document.

The committee agreed that reviews of the SWGDRUG Recommendations should continue and a new version of the document will not be released before the next meeting.

THURSDAY, JANUARY 12, 2012

Reporting Sub-committee Update

Linda Jackson presented a final draft of Supplemental Document-5 (SD-5), which included two examples of reporting formats. The core committee reviewed the document and provided feedback and comments. The document had been amended to remove extensive report formatting so examples were based solely on SWGDRUG recommendations. The committee agreed that the reporting examples will be useful for the forensic community by providing different ways to report the same information.

Pamela Reynolds made a motion for the SWGDRUG core committee members to accept SD-5 with the changes discussed and to provide it for public comment for 60 days. Scott Vajdos seconded the motion. All present committee members unanimously voted to approve the motion.

Uncertainty Sub-committee Update

Suzanne Bell presented an update of Supplemental Document-4 (SD-4). The core committee provided comments and suggested edits which were incorporated into the document after discussion. Dr. Bell reviewed each of the uncertainty calculations with the committee and there was discussion regarding some calculations in the uncertainty budget table. Some of the statistical components in SD-4 will be addressed with assistance from NIST and statisticians. Sub-committee members will complete the document after input is received from statisticians at which time an updated document will be distributed for an email vote. Following the vote, the document will then be sent out for public comment. Mr. Oulton asked the committee to please respond either affirmative or not.

Reference Materials Sub-committee Update

Sylvia Burns presented an outline of the issues relating to reference materials that should be addressed by SWGDRUG. Dr. Burns stated that the sub-committee will review other existing documents regarding reference materials to assess their relevance to SWGDRUG. Topics included the application of certified reference materials in drug analysis, redefining the term "traceability" in the glossary, and the various types of reference materials, including reference data, which could be used to make an identification. Dr. Burns proposed that these issues should be addressed in the main SWGDRUG document. The sub-committee will continue working on these topics and will have a draft for the core committee to review at the next meeting. The core committee had further discussion regarding the use of reference materials and minimum requirements for identification. The core committee agreed the Reference Materials Sub-committee should be a formally recognized sub-committee. Mr. Oulton stated that Jill Head (note taker) will continue working with the sub-committee on the draft until the next meeting and longer if necessary.

Education and Training Sub-committee Update

Richard Paulas reported that the training website will not be pursued. Mr. Paulas proposed the creation of a supplemental document in support of ENFSI documents to outline training objectives for particular topics. The supplemental document would provide a list of questions that a trainee should be able to answer at the completion of that training topic. The committee agreed with the direction of the Training Sub-committee and that this would be valuable to the community. The sub-committee will continue compiling questions and will prepare a document that will include an introduction, several analytical techniques, and several drug sections available for the committee to review. After completion, the document will then be sent out for public comment. At that time, suggestions for new questions and training topics will also be requested from the public.

Sub-Committee Status Updates

Mr. Oulton summarized the status of the sub-committees as follows:

Reporting: members will assist Reference Materials Sub-committee until comments are received from the public

Reference Materials: Burns (chair), Yap Tiong Whei, Reynolds, Crean (guest), Head (consultation)

Next SWGDRUG Meeting/Closeout

Mr. Oulton asked the committee to inform their organizations by email when the reporting documents have been posted for public comment and to copy SWGDRUG@hotmail.com to document the communication. Mr. Oulton stated that John Paul Jones (guest) was very

complimentary of SWGDRUG and that the group was highly productive. Mr. Jones was impressed with the intricacies of an international SWG where the science and older documents were ensured to be current.

Mr. Oulton thanked all committee members and guests for attending the meeting and for their participation, hard work, and time. Mr. Oulton thanked Dr. Bell for the work she did on the uncertainty documents, Mr. Powers for his work on reporting examples and Mr. Paulas for his work on the training documents. Mr. Oulton also thanked Jill Head for taking notes and Sandra Rodriguez-Cruz for her hard work leading up to and during the meeting.

Mr. Oulton and Mr. Paulas thanked Ms. Jackson for the constant editorial updates she made and her work which resulted in the reporting documents being released to the public.

The next SWGDRUG meeting is tentatively scheduled for the week of July 9-13, 2012.

Minutes respectfully submitted by Jill Head