

ISAG Conference 2006, Porto Seguro, Brazil

### **Animal Forensics Standing Committee Workshop**

Based on the level of attendance in Room 1, the main room of the conference venue, there was obviously much interest in this area of animal forensics.

Instead of a “seminars only” format like we did in Japan, where it served us well for a first meeting, the animal forensics steering committee deemed that a series of ‘refresher’ seminars and an hour-long roundtable meeting would be most appropriate for the Brazil meeting. Unfortunately, four of the five steering committee members did not attend the conference.

The forensic workshop was conducted in two sessions: one on Monday the 21<sup>st</sup> of August, 2006 and the other on Thursday the 24<sup>th</sup> of August, 2006. As this was going to be the first Animal Forensics Standing Committee meeting the goal was three pronged:

1. Introduce the membership to animal forensic DNA casework, research and conventional and novel tools in this field (the workshop session on Monday the 21<sup>st</sup> of August).
2. Introduce the membership to tried and true approaches of developing validated panels of forensic markers (the session on Thursday the 24<sup>th</sup> of August).
3. Conduct a formal meeting to confirm the line-up of existing standing committee members and add additional members if nominated and elected by the membership (the session on Thursday the 24<sup>th</sup> of August).

The first workshop session was chaired by Sree Kanthaswamy (SK) from UC Davis and co-chaired by Dr Wim van Haeringen from the van Haeringen Laboratorium in the Netherlands. This session included introductory comments by the chair, and a series of presentations including one by SK on animal forensics, definitions, casework examples, protocols and standards in the industry; a second by Dr Ross McEwing from the Wildlife DNA Services, Bangor, UK, on the partnership approach to wildlife DNA forensics in the UK - an approach that might work for networking domestic animal forensics lab within ISAG; and, a third by Dr Peter Kesners (who is affiliated with C.Y. O'Connor Village Foundation, Perth and Genetic Technologies Pty. Ltd., Melbourne, Australia) on a novel method of improved genomic typing by targeting the genomic frozen boxes within the MHC for animal and breed identification. SK's *impromptu* presentation was a last minute change to the original schedule of the program where Dr Matthew Lorence of Affymetrix Inc., USA, was to have been the first speaker.

For the second workshop session which was also chaired and co-chaired by SK and Dr. Haeringen, two seminars were presented to achieve objective #2 and to achieve objective #3 a roundtable format was established. The first of the presentation during that session was by Dr Mikko Koskinen from Finnzymes Diagnostics, a private biotech

company in Finland. He described the method for developing forensic genetic marker panels and kits in accordance to forensic criteria and commercial standards. Dr Marilyn Menotti-Raymond from the US National Cancer Institute was the presenter of the second talk. She described the process, in accordance to that described by the first presenter, Dr Koskinen, for establishing a standardized and validated panel of cat STR markers for forensics use in the US.

At the roundtable meeting the current and former chairs of the companion animal, horse and cattle standing committees as well as speakers from the forensic sessions who were interested in sharing their ideas during the discussion were invited to participate. The idea behind this invitation was to have as much open and unabated discussion among the standing committees that were involved with the quartet of species of significant animal forensics interest (i.e., cat, dog, horse and cattle) so that the ultimate decisions concerning testing in accordance to forensic criteria would neither impede nor impinge upon the charges and the goals of those standing committees. Basically the notion was that we would work in unison as practically as possible.

Those present at the roundtable included:

- Ross McEwing                      Independent
- Leslie Lyons                        Cat
- Peter Kesners                      Independent
- Cyndi Harper                        Dog
- Alan Guthrie                        Horse
- Leanne van de Goor                Cattle
- Gus Cothran                        Horse
- Marie-Yvonne Boscher            Cattle

The following was the agenda for the meeting.

### **Agenda - 2006 Roundtable discussion**

1. Forensic and non- forensic testing
2. Present Guidelines from Budowle et al. 2005
3. Proficiency tests v. Comparison tests
4. Accreditation/Certification
5. Databases
6. Nominate new standing committee members

#### **1. Forensic and non- forensic testing**

Since the Japan Forensics Workshops were not conducted under the auspices of ISAG, this was the first formal meeting. One objective was to determine how ISAG labs interested in forensics were affiliated with forensic research and casework. Consequently, some time was spent on describing and discussing the differences between the forensic and non-forensic testing. It was evident that many labs were

unaware of their level of affiliation to forensic services - do they provide this type of service or not?

Many felt that this distinction was an important one and a first step in developing guidelines and SOPs for forensics labs. Some even noted that any sample received may potentially end up in court even if it was originally submitted for routine testing and therefore justified the use of forensic guidelines for developing databases generated by routine testing as well as good lab practices. Others added that in addition to this, forensic-specific work requires really high levels of standards protocol implementation, including much peripheral work such as taking photographs of evidentiary items and storage of evidentiary samples.

The idea of having two separate sets of guidelines for forensic labs and parentage labs was moved and seconded but ultimately did not carry because a submotion was proposed to start planning towards the future by committing to establish, between now and the next conference, an appropriate approach to developing these guidelines; the submotion was carried.

## **2. Present Guidelines from Budowle et al. (2005) were presented.**

The next agenda item (#2) pertained to the establishing and implementing of guidelines that had been published by Budowle et al. (2005) in the *International Journal of Legal Medicine*. Those guidelines were consolidated from the forensic workshops and roundtable meeting at the Japan meeting in 2004. The article entitled, "Recommendations for animal DNA forensic and identity testing" was deemed to be an excellent template upon which a more detailed recipe for good lab practices may be formulated for ISAG labs. The other authors of the article are Drs Paolo Garofano, Andreas Hellman, Melba Ketchum, Sree Kanthaswamy, Walther Parson, Wim van Haeringen, Steven Fain and *Tom Broad* – each of these authors is a seasoned practitioner in the field of routine and/or forensic animal testing.

A brief summary of the article was presented by SK highlighting the differences between forensic and non-forensic testing and the procedural routes one would take if the case is one of forensic typing. SK stressed the importance of the Budowle et al paper (2005) and highly recommended that the membership read this article for the meeting in Amsterdam.

Without understanding the delineation between forensic and non-forensic labs that are affiliated with the ISAG agenda points 3-5 are moot. These issues cannot be addressed without a more concrete understanding of what the ISAG community wants. For example, there are ISAG affiliated labs that either do parentage testing or forensic testing and there are labs that provide both types of services. Should there be separate guidelines for forensic and non-forensic work or should there be only one set of guidelines for all labs? Once a clear understanding is achieved based on the feedback from all interested parties during the Amsterdam 2008 meeting a more solid plan may be designed to address issues such as implementing proficiency tests, standardized

nomenclature, marker selection and achieving human standards, etc. To this end, the Amsterdam meeting will be designed with a larger allocation for brainstorming sessions and as thus a smaller allocation for lecture or seminar presentations.

## **6. Nominate new standing committee members**

At the outset of the Brazil 2006 meeting the committee technically was still a steering committee. As such, at the formal session during the Brazil meeting, we established our first Standing Committee by retaining the original members and the Chair and introduced four additional members. This structure was ratified. A total of nine members were justified for achieving our goals for the next meeting in Amsterdam 2008. The membership was asked to nominate and elect four additional committee members: They are Drs Wim van Haeringen, Ross McEwing and Mikko Koskinen and Ms Beth Wictum. Therefore, in addition to the members named above the current standing committee membership includes Drs Steven Fain, Joy Halverson, Paolo Garafano, Andreas Hellman and Sree Kanthaswamy (Chair). It was noted at the meeting that some of the committee members may not be current ISAG members and as such are violating the Society's rules.

*In accordance to ISAG's guidelines for members of the Standing Committees and Chairs, the membership status of each member of the standing committee is to be confirmed by the Secretary upon notification by the Chair. If anyone is found not to be a current member of ISAG, the Chair will have to terminate their affiliation with the standing committee.*

The new standing committee agreed to maintain contact by electronic mail and will continue to discuss the possibility of a more detailed draft of guidelines for forensics testing that may be published in the Journal of Animal Genetics.

The roundtable session adjourned.