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Preliminary notes for the defense of Mr. Raffaele Sollecito relating to the operations of Hematology forensicP.P. n. 9066/07 mod 21 public prosecutor of Perugia

As a technical consultant appointed by the lawyer. Luca Maori to the defense of Raffaele Sollecito, I participated in the operations of technical advisory forensic blood performed from the day 12.11.2007 by Dr. Patrizia Stefanoni and still under processing.

The investigations carried out so far shows in particular the following.

It was noted at the outset that the findings set out below, attributable to Sollecito and examined from the date 12/11/2007, it was no biological trace useful to the investigation:

- 38) T shirt with the initials "RS";
- 39) Slip for women brand Abercrombie;
- 40) Yellow polo shirt type Lacoste;
- 41) T shirt yellow orange brand Nike;
- 43) Lacoste green polo short sleeve type;
- 46) Small towel yellow, white and salmon;
- 50) A Dishcloth red and white;
- 51) B cloth (rag on the floor);
- 53) D Dishcloth blue and white;
- 54) E Dishcloth red and white.

Due to the lack of evidence the CT of the PM considered not to proceed with further investigation.

Also on exhibit: 37) wide white skirt, seized in the apartment of Sollecito were not highlighted areas of interest forensic blood and therefore we didn't proceeded to investigate further.

Other findings we proceeded to identify micro-traces of possible biological nature that were removed and subjected to further laboratory.

In particular result is as follows:

32) Scarpe Nike n. 42 marrone e giallo: lo studio macroscopico del reperto ha permesso di evidenziare sulla suola delle scarpe la presenza di materiale eterogeneo di consistenza e colore vario, adeso tra i vuoti della suola stessa sul qualc sono state eseguite per ciascuna suola n. 4 campionature (scarpa destra: A, b, C, D e scarpa sinistra: E, F, G, H).

<u>The preliminary analysis for the search of human blood</u>, through the use of a commercial kit (Hexagon OBTI) based on a reaction immuno-chromatographic, <u>has</u> <u>provided for the samples negative results</u>.

Of this finding DNA analysis carried out so far <u>have not provided any state</u> <u>amplification product</u>, the analysis is still in progress,

33) Switchblade knife CRKT brand with black handle, partially serrated blade with a size of 8.5 cm x 2 cm (maximum width blade) and a handle 10 cm (according to the measurements reported in the minutes of PS). On said specimen is detected is an area of reddish soiling in correspondence of the hook of fixing that has been withdrawn (A). Other samples were then carried out one in correspondence of the blade (B) and another in correspondence of the handle (C).

On a 'rate of the material forming the trace A (reddish stain on the hook fastening) was carried out <u>the preliminary analysis for the search of human blood</u> with the same commercial kit (Hexagon Obti) <u>that has provided negative results</u>. This survey has not been performed. on the other two samples.

Of this finding <u>DNA analysis carried out so far have not provided any state</u> <u>amplification product</u>, the analysis is still in progress. 34) Slip type boxer shorts for men with large areas brownish red of soiling dried at the perineal region,

On this finding were carried out n. 3 samples (A, B, C) for which was positive the preliminary analysis for the diagnosis of human blood; the subsequent amplification of DNA has provided for samples A and B a genotypic profile compatible with that of Amanda Marie Knox . No amplification was obtained for the sampling C.

35) knife brand SPAIDERCO HELIX with black handle a total length of 18 cm and 8 cm of which the blade (measures reported by PS) and whose blade has a continuous thread.

Of this finding, which did not show evident traces of possible biological nature have however been carried out n. 3 samples respectively in correspondence of the blade, another in correspondence of the handle and a third interstice of accommodation of the blade itself. Of these three samples were not carried out preliminary tests for the detection of human blood.

Of this finding <u>DNA analysis carried out so far have not provided any state</u> <u>amplification product</u>, the analysis is still in progress.

36) type of kitchen knife with black handle overall length of 31 cm to 17 cm in blade and handle 14 (Measures reported by PS).

On this finding were carried out n. Two samples:

(A) In correspondence of the blade; (B) in correspondence of the handle.

None of the samples and underwent preliminary investigation for the detection of human blood, but both have been subjected to DNA analysis that gave amplification products of extremely weak intensity and considerably below the minimum recommended by the recommendations of the GEFI (Italian Group Pathologists Forensic); furthermore, the results obtained have not been consistently reproduced in the other amplifications since for the same samples were obtained amplifications with buoyancy allelic differences for some loci. 42) Polo purple long-sleeved: on said specimen is detected is an area of soiling reddish brown on the left sleeve, at the rear, near the cuff (B) for which the DNA analysis have provided negative results, that is, have not given rise to any amplification product of the material. Negative result also provided DNA analysis done on the sample (A) carried on the collar of the garment. This indicates the absence of traces and evidence of hematologic forensic interest.

45) Towel white vertical stripes of green color: was revealed broad brownish yellow halo which has been performed a sample (A); on it has not been performed the preliminary test for the detection of human blood while the subsequent analysis of the DNA gave no amplification product and is therefore negative.

47) white cloth with green and brown spots: on which were performed the following four samples A, B, C, D.

On these samples were not carried out preliminary tests for the detection of human blood. In contrast DNA analysis has provided for the sampling A an amplification product mixed in which is detectable even a genetic profile compatible with a male subject different from that of the suspects; also for the sampling C we obtained a product of amplification mixed in which it is evidence of a genotypic profile compatible with Raffaele Sollecito

48) Red plastic bucket: of which were performed n 2 samples A and B, and then, on 15.11.07, two other samples C and D. for these last two DNA analysis has not provided any amplification product, indicating that is not present biological material. For what concerns the samples A and B instead we obtained a PCR amplification status can not be interpreted, and that will be the subject of further investigation.

49) Gloves size 7 in yellow and green plastic on the volar aspect of the right glove were shown some small red spots that were sampled (A). DNA analysis has provided a mixed result and substantially negative because it can not be interpreted.

52) C - Dishcloth green and white; on which have been marked brownish small areas that have been sampled A and B. It was not carried out the analysis species specific for the diagnosis of human blood and subsequent DNA analysis have not provided any amplification product, indicating that on it there is no human biological material.

55) F - Dishcloth: it is detected a small area brownish that has been taken (A); not been carried out the analysis for the detection of human blood while the amplification of DNA has provided a mixed profile, that indicating that said track is constituted by biological material more individuals could be identified including a DNA profile attributed to Raffaele Sollecito but also due to other profile Amanda Knox.

56) Sponge yellow and green with numerous hair even long (collected) that have been taken but to date still to be analyzed;

It was also performed a sample (A) of a dark spot present on the green portion of the exhibit that has not been subjected to analysis specific for the human species and whose amplification gave rise to a genetic profile compatible with that of Amanda Knox. Another sample (B) was performed on the yellow portion of the exhibit with a negative result for the amplification of DNA, indicating that there is no biological trace of forensic interest.

Subsequently, they were examined and analyzed further finds, in particular those taken during the technical verifications performed on the day 13.11.2007. at about 17.00 in Perugia on car of Mr. Raffaele Sollecito and then at 21.00 in the apartment of Mr. Sollecito on the night of 13.11.2007, as well as on some findings collected in the home of the victim. The findings examined today are listed below and identified by consecutive numbers from 59 to 111.

Subsequently, on 27.11.2007 I have read the preliminary results of analysis pertaining to these findings, described below.

Findings related to Amanda Knox:

109) Black trainers brand Skechers on which there are no obvious traces. On the soles are made n. 3 samples on the right (A, B and D) and n. 2 samples C and E to the left).

The above samples have resulted in partial profiles or illegible, with the exception of sample C whose genotypic profile obtained is compatible with that of Amanda Knox.

110) Multicolored bag on which are performed n. 3 samples (A, B and C), the analysis is still in progress.

Within it are found: a blue wallet containing some phone cards, a glasses case, a power cord of mobile phone. These objects do not show evidence of hematologic forensic interest.

111) Chewing gum was found attached to the cabinet. Did not provide any results, the analysis is still in progress.

59) Bra belonging to the victim Meredith (7D) diffusely stained with blood in the front portion with shoulder and right side (hooks connection) torn. Performed 4 samples (A, B, C, D). DNA analysis showed genetic profiles compatible with the victim: the analysis is still in progress.

60) green towel found under the corpse with wide traces and diffusely soaked on which were performed two samples (A and B) which was performed DNA quantification may be present giving rise to a negative result, indicating that there is no material biological, and then DNA in the sample extract. There were no further investigations therefore carried out on the artifact.

61) White towel with large area of soiling like blood on which were performed two samples (A and B) for which DNA analysis has provided genetic profiles related to the victim. 62) Light beige towel found on the bed with ample traces of soiling like blood. There have been no. 3 samples A, B and C. For the sample A has got a genotypic profile attributable to the victim, the other two samples are still being analyzed.

63) white sheet widely smeared with blood like substance on which they are found some hairy formations (the state not yet been investigated in the laboratory), executes two samples (A and B) for which the state are still under analysis.

64) n. 3 fragments of toilet paper crumpled (one of which has a halo of soiling reddish clear) on which are performed for each a sampling (A, B, C); a fragment of wadding (sample D). The fragment A is in a sachet, those B, C and D in another sachet.

DNA analysis has shown for samples A, B and C genetic profiles compatible with that of the victim, not readable for the sampling D; analysis are still in progress.

65) Trace of presumed blood substance found on the front wall of the bedroom (N) DNA analysis revealed a genetic profile consistent with that of the victim, the analysis is still in progress.

66) Trace of presumed blood substance found in bidet in the apartment of the victim and adsorbed onto tissue paper: DNA analysis revealed a genetic profile consistent with that of the victim, the analysis is still in progress.

Artifacts relating to the car Audi A3 owned by Raffaele Sollecito;

67) a sample (1) in correspondence of the front passenger side, the left side upper dashboard.

68) a sampling (2) in correspondence of the front passenger side, on the outer surface of the dashboard glove compartment, left side.

69) a sample (3) in correspondence of the front passenger side, on the outer surface glovebox, the right side.

70) a sample (4) at the driver's side, on the headrest.

71) a sample (5) in correspondence with the accelerator pedal.

72) a sample (6) in correspondence with a discoloration under the steering wheel, near the anti-theft system.

73) a sample (7) at the handle inner opening of the left door.

74) a sample (8) at the handle inner opening of the right door.

75) a sample (9) in correspondence of the luggage compartment.

76) A sample (10) at the lever of the front seat indicated on the report of the Scientific Police as right (I remember it was the left seat - driver's side, however, this discrepancy can be ascertained through the photographic documentation of the Scientific Police).

77) a sampling (11) in correspondence of the seat of the rear seat side front - right.

78) Exhibit (A) Pedal rubber cover of the clutch pedal, left.

79) Exhibit (B) pedal rubber cover of the brake pedal, right.

80) Exhibit (D) of light-colored cloth found in the glove compartment of the car in front of the front right seat.

81) Exhibit Mat front left, driver's side;

82) Exhibit mat front right passenger side;

83) Exhibit mat rear left, on which detects a formation pilifera not yet examined; on this finding was performed a sampling (A) whose DNA analysis has provided negative results.

84) Exhibit mat right rear;

For the findings: 81.82 and 94 have not been marked traces or stains of forensic interest, with the exception of a formation pilifera in correspondence that were not performed sampling and analysis of forensic hematology.

For the finds: 67, 68, 69, 70, 74, 75 and 80) was performed to quantify the DNA may be present in the product extraction which has given rise to all

negative result, indicating that there is biological material, DNA, and then, in the samples extracted. There were no therefore carried out further investigations on the artifact.

For the finds: 71, 72, 73, 76, 77, 78 and 79 DNA analysis has provided the amplification products in fact negative.

Exhibits related to the inspection of the day 13.11.2007 at 21.00 in the apartment of Raffaele Sollecito:

85) paper tissue (Rep 1B) taken place on the cabinet on the front wall of the bedroom, on which detect two small traces of blood like material; are performed two samples (A and B) for which the DNA analysis has provided genetic profiles compatible with Raffaele Sollecito;

86) Another paper tissue (Rep 2B) present on the desk aprete placed on the right of the bedroom, on which has been performed a sample (A) for which the DNA analysis has provided a genetic profile compatible with Raffele Sollecito;

87) n. 2 diskettes of white paper (Rep 3B) placed under the cabinet of the desk, on which are performed two samples (A and B); DNA analysis has provided for the sampling A a clear genetic profile compatible with Raffele Sollecito: for sample B was obtained an amplified mixture with clear profile, compatible with Sollecito and another, much smaller, attributable to other unknown subject and, in particular, not compatible with that of the victim;

88) receipt (Rep 1E) found inside a plastic bag from the supermarket "Todis" dated 5.11.2007, which analysis can detect the purchase of various groceries besides a depilatory tweezer; in correspondence with an area of brownish soiling was performed a sample (A) whose quantification of DNA in the product extraction has given a negative result, indicating that the stain is not formed from biological material. Were not performed further analysis.

89) gloves in red plastic of kitchen (Rep 2E) measure Extralarge magenta, found within the drainer no obvious traces of contamination.

On them were performed two samples (A and B) to the state still being analyzed.

90) a sponge cloth of light blue color (Rep 3E) found in the drainer on which is carried a sample (A); which DNA analysis has provided a genetic profile compatible with Raffele Sollecito.

91) a siphon of the kitchen sink (Rep 4E), on which are performed two samples (A and B); for the sampling A DNA quantification was negative, while for the sample B DNA analysis has not provided any product of amplification indicating that there is biological material of human nature.

Exhibits related to the inspection of the day 16.11.2007 in the apartment of Raffaele Sollecito:

106) sponge colored yellow and green (type Vileda) of which were performed two samples each (A) on the green side and the other (B) on the yellow side of the exhibit. For the latter, the quantification of DNA has provided a negative result, indicating that there is no biological material of human nature on it. For the sample A was amplified got a mixed state unreadable, are still being analyzed.

107) Cutlery drawer with all the cutlery taken from the kitchen of Sollecito on which there have been found traces of forensic interest that are not carried out further investigations.

108) Cutlery baskets yellow plastic with two areas of brownish in the bottom of two of its compartments on which are performed two samples (A and B); DNA analysis has not provided any amplification product, indicating that there is no biological material of human nature on them.

Further analysis is still in progress:

- 32) Nike shoes n. 42 brown and yellow
- 33) Switchblade knife brand CRKT
- 35) switchblade knife brand SPAIDERCO D'ELICA.
- 48) Red plastic bucket samples A and B.

Are yet to be analyzed:

44) Women's Pullover Long Sleeve purple size 44 brand Divided.

On this garment have not been found traces or streaks the possible nature of blood to which have not been made samples. Were, however, found some formations hairy that state have not yet been analyzed: 4 long hair (about 10-14 cm long eye) 2 formations hairy medium length short.

56) Sponge yellow and green with numerous hair even long (collected) but to be analyzed, in addition to the sampling A compatible, as said, with the profile of Amanda Knox.

All the findings indicated by n. 92 no. 105, relating to the various samplings carried out by technique with Luminol for the search of traces latent in the apartment of Sollecito Raffaele.

BRIEF PRELIMINARY CONSIDERATIONS

The above results, although partial and incomplete because of the large number of artifacts yet to be analyzed in this hematology forensic criminal proceedings and investigations to be completed for some of them, however, allow to express a preliminary view for the defense of Mr. Raffaele Sollecito, as those examined so far relate for the most part to that investigation.

From the data obtained so far in the field of hematological forensics is quite clear that on any exhibit analyzed, and especially not on the clothes or the shoes nor on any item seized from Raffaele Sollecito, there is no evidence of human blood that can be attributable to the victim. Furthermore, on the findings of the victim examined and those found in his apartment, has not been found through the use of DNA polymorphisms no trace of biological material attributable to the suspect Sollecito Raffaele.

As far as regards the results currently obtained should be stressed that one of those that has provided a clear and unequivocal amplification product is the type boxer briefs on which there was a plentiful area of soiling that the blood analysis of DNA polymorphisms allow you to bring back to Ms. Amanda Knox, who has presumably worn this underwear in a period when she was menstruating, this hypothesis is fully compatible with the arrangement and morphology of the blood stain on the garment, even if it is not performed the assay for the diagnosis of regional blood.

On the kitchen knife seized in the apartment of Raffaele Sollecito there are no biological traces due to the above mentioned, having to be ruled out that the use made of it in the period before its evidence collection. Furthermore, none of the two samples was subjected to the investigation before for the search of human blood while the analysis of the DNA of these has provided, as mentioned, the amplification products extremely weak in intensity and considerably below the minimum limit recommended by the recommendations of GEFI (Italian Group Pathologists Porensi) but above were obtained in the various amplifications performed on the two samples incomplete profiles and with buoyancy allelic differences for some loci, such as not to allow a correct use of these results at the end of forensics, state not uniquely interpretable and theoretically even due to analytical artifacts.

On both knives owned by Raffaele Sollecito DNA analysis, which is still being completed, provided no amplification product were being able to exclude that on them can be traced blood belonging to the victim Meredith Kercher Susan Cara. In particular, the switchblade knife marco CRKT (33) the preliminary analysis specific for the search of human blood was negative on the only track tested three ones present on it, indicating that it is not formed from human blood.

On the soles of the shoes of the same have not been detected traces of blood, which. if would certainly have been highlighted present, both immunochromatographic preliminary analysis for the specific search of human blood and is from the next using the amplification of DNA polymorphisms that although still being completed, the state did not provide any state amplification product, suggesting that on them is not present materiale biological generally and, in particular, there is no blood.

The discovery on exhibit 55 P (cloth) genotypic profile a mixture in which it is identifiable even to Raffaele Sollecito and possibly that of Amanda Knox seems quite logical for the fact that objects in the apartment of Raffaele Sollecito were collected from these regularly used for cleaning his house, where he had often hosted Amanda Knox.

Similarly, the detection of a genetic profile consistent with that of Raffaele Sollecito found on items 85 (paper tissue-Rep 1B), 86 (another paper tissue Rep 2B), 87 (no. 2 paper for white Rep 3B) and 90 (a terry cloth of blue Rep 3E) collected in the apartment of the same, indicate that such items have been used by Sollecito.

In short, based on the above results lead to peacefully support the foreignness of Raffaele Sollecito to the story of the murder of poor Meredith Kercher Susanna Cara, since no biological evidence was, as mentioned, found on the findings that examined of afferent housing victim (of which the undersigned technical Adviser was made available). But no more exhibit pertaining to the Sollecito, among the many already examined, was suffering from biological traces related to the victim.

These findings appear to be of great importance when taking into account the huge harmfulness found on the corpse of the victim and of the peculiarities of the premises drawn and therefore detrimental to the presumed mode, which allows you to feel how it less likely that the attacker hit the woman has been smeared of blood.

Rome, 28 November 2007

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