

Evidence is everything v1.4
A fanbook for SLA Industries

A fanbook concentrating on forensic investigation, serial killers and brainwork.

Content by
Rob "Evilscary" Leigh
John "Wookiedamokole" Runchey
Kris "MK" Steel
Leath Sheales

Contents:

- 1: Introduction
 - A word on this fanbook
 - Forensic science on Mort
 - Forensics and the media
- 2: The Crime scene
 - Forensic procedure
 - What does all this blood mean?
 - Trace evidence
 - The Ebb and forensics
 - The loneliness of death is fleeting
 - Departments and people
- 3: Back in the lab
 - The signs of death
 - The alien races and forensics
 - Stormers and Karma
 - Firearms and weapons
 - The rate of decay
 - Forensic entomology
 - The autopsy
- 4: Evidence is everything
 - Guilty until proven innocent
 - The use of evidence in BPNs
- 5: A view from the dark side
 - Serial killers
 - Case files
- 6: The rules
 - Forensics rules
 - Equipment
 - Notes on running forensics games

Chapter 1: Introduction.

A word on this fanbook.

SLA Industries is a role-playing game. When I play or run SLA, I do it to have fun, to escape into a dynamic fantasy world.

To this end, the rules in this fanbook do not follow real-life forensic procedure; they are closer to 'Hollywood Forensics', as you might see on TV or in films. I have taken liberties with the forensic process, speeding up elements and simplifying or even removing others.

In real life fingerprints, DNA tests and other forensic procedures take months to complete and are rarely 100% accurate, where as in Hollywood forensics, toxicology and DNA tests often yeild instant results. Blurry photos and video can be greatly magnified and sharpened to clearly reveal the most minute details, and audio recordings can be similarly processed, to an unrealistic degree. Searches of computer databases of fingerprints, employee records, etc. are shown to be almost instantaneous and nearly foolproof.

The chapter concerning the decay of a body is also much simplified for ease of play. If you want to research the entire process of cellar decomposition, please be my guest! For the purposes of this fanbook, however, I have cut certain points and processes to streamline the chapter and associated rules.

This sourcebook also assumes that the characters, as Operatives, will be involved with every stage of the investigation; in reality the forensic investigators rarely work on any other aspects of a case other than the initial crime-scene. The autopsy is handled by a coroner, the investigation and arrest of suspects is left to the police. But that's just boring.

This, while unrealistic, is much more fun in a role-play game, and I hope that you the reader will take the content of this book as it is intended.

Parts of this fanbook are also based on ESWoP, and so might not mesh with your own vision of the World of Progress. In these areas I hope you can adapt the book to your own WoP.

Forensic science on Mort.

The majority of crimes that take place on Mort do not get the benefit of detailed forensic work. The sheer amount of murders, suicides, rapes and robberies that take place in a single day in any given sector make the time-consuming process of crime-scene investigation an expensive and, in the case of 70% of most crimes, pointless procedure.

"So what happened here then, Ed?"

"Well Sarg, looks like someone shot the victim with a weapon chambering an 8mm rifle round in the back of the head, probably at close range. I'd say it was a CAF pistol with the barrel re-milled to-"

"Bah, who cares what they used? The husband's not here right? And the neighbours said they heard arguing last night between the pair of them, so it musta been him, right? Case closed, put out a Termination Warrant for him."

"But sarg! I think-"

"Listen son, I don't have the time. Now get your arse up to 3rd and Bachman; there's been a shooting and the place needs checking over."

- Conversation between Shiver Sergeant Anton Streebeck and Forensic Shiver Ed Friday.

The only time proper forensic work gets done is if an Operative squad are brought into the investigation. There are forensic Shivers, but they are usually so overworked they only give crime scenes a cursory sweep to pick up the most basic evidence and then pass it on to the investigating body; whether that be another Shiver unit or a squad of Operatives. Monarch do not employ a forensics squad. When they come across a body they are required to notify the local Shiver station and guard the site until a forensics squad can arrive. Whether any Monarch units are still at the crime-scene when the Shivers finally arrive is usually a hit-or-miss affair. Some Monarch do wait for Shivers, some leave after waiting, some don't bother waiting at all. Others are sometimes bribed or intimidated and when the Shivers arrive it is to find an empty crime-scene, wiped clean of evidence.

When a case is handed to Operatives, for whatever reason, they are usually expected to do **all** the required work, from initial crime-scene investigation, through the autopsy of any victims, to the eventual apprehending of the criminal. For the duration of their investigation most Operatives will be given access to the local Shiver Morgue, given the use of an incident room at the local Shiver station, and access to any pertinent records. This does not, however, guarantee the cooperation of the Shivers on their part. Some Shivers are glad to have Operatives helping them, taking up some of the workload and doing the tedious business of examining the crime-scene. Other Shivers see the Operatives as stealing their glory, muscling in where they're not wanted and trying to boss Shivers around; and indeed, some Operatives are known to do this.

The science of Forensics in the World of Progress has benefitted much from the existence of Karma, Ebb users and the many technological marvels SLA have created over the years. But these same marvels have also added their own complications to the forensic process.

Fingerprints, once a reliable way of identifying criminals, can now be copied by cloning skin-cells or removed from a person's hands altogether. DNA evidence can be altered by various legal and illegal drugs. The Ebb allows Ebons and Brainwasters to psychoport in and out of locked rooms, or to kill with powers that leave few links back to the killer. And then of course you get the good old-fashioned latex gloves; killers who clean up after themselves and the biggest impediment forensics officers on Mort can encounter: the eternal rain that washes away vital evidence.

Forensics and the media.

The media **love** forensics Operatives. It is a science rarely employed in the course of main-stream BPNs and the general public of Mort eat up shows with forensic segments and scream for more.

Any squad that shows a talent for forensic science is likely to find itself followed around by a high-quality camera crew and will usually get put forward for more investigation-style BPNs. Some squads have made their careers out of White BPNs alone due to their TeeVee deals.

The best forensic operatives play to the camera, explaining their methods in a intelligent yet not condescending manner, leading the audience through the autopsy or crime-scene like a museum guide showing off exhibits. These Operatives soon find themselves with sponsorship contracts and hordes of fans.

But some Operatives try to stay out of the limelight, believing that by televising their techniques they give the killers the information they need to commit unsolvable crimes. Indeed, since the recent surge in forensic-BPN shows, the number of crimes in which the criminal burns or tampers with evidence to erase their forensic signature have increased. Blood-B-Gone, an illegal substance used to destroy DNA evidence, has also arrived on the black-market in recent years as well, some say in response to the media attention on DNA profiling.

Chapter 2: The Crimescene.

Typical Forensic procedure.

The first stage of most forensics examinations tends to be the crime scene. Ideally, a crime scene will have had the perpetrator present, the victim if there was one, and no one else. Once other people, animals, or environmental factors begin to affect the scene, the ease of collection of evidence and the nature of that evidence will change. At the scene of the crime, the criminal will have left certain details that initially allow the investigator to know what occurred, and eventually will lead the Operative to him. If the criminal is smart (and most aren't) he will have reduced the amount of evidence left behind, or will have altered that evidence in an attempt to distract, mislead or lose the investigators. Remember that in the effort of altering or destroying evidence the subversive may inadvertently leave even more evidence.

When a forensics officer, whether they be a Shiver or an Operative, arrives at a crime-scene the usual procedure is as follows. Status (Operatives outranking Shivers) and SCL usually governs who acts as primary forensic officer, with the other attending officers acting as backup. If an Operative squad is working the crime-scene then any forensic Shivers are usually drafted into doing the mundane work like dusting the area for fingerprints and taking photographs, while any Monarch units are relegated to guarding the area.

Step 1: Locate and confirm all victims.

The whole team sweeps the crime-scene for any undiscovered bodies or still-living victims. Usually armed Shivers or the non-forensic members of the Operative's squad act as backup at this stage, in case the criminal is still present (it's not unknown for serial killers to lurk, hidden, at the scene of their kills and ambush forensic staff).

Step 2: Secure area.

Once the area is secure any entrances are sealed off and guarded while the forensics officers go to work, to ensure that no evidence is taken, corrupted or planted. If the area is too open to be sealed; such as an alleyway or plaza, then the area is cordoned off and guards place around the perimeter. Usually a squad of Shivers or Monarch officers is assigned to augment the Operatives in guarding the area.

Step 3: Photograph scene.

The whole scene is photographed, usually from as many angles as possible. Body posture, correlation of evidence to body, location of blood-splatter, all are recorded so that, once back at the station, the investigating officers can remember how the scene looked.

Step 4: Outline victims and mark any other evidence.

This usually takes place at the same time as stage 3. Any bodies are outlined to mark their position in the crime-scene. Any shell-casings, discarded weaponry, blood-splatter, bullet-impacts and other useful evidence have numbered markers placed next to them, to highlight their location on scene-of-crime photographs and allow for easy cataloguing.

Step 5: Remove bodies and other evidence and catalogue.

Once the scene has been recorded the bodies are bagged, tagged and taken to the morgue for storage. The evidence is bagged up, each piece in a separate bag, and as it is collected a catalogue is kept, describing the evidence, where it was found and any other important information. Once all the evidence is collected it is placed into a secure container and the container is sealed (to prevent tampering).

Step 6: Dust area for prints and other trace evidence.

The area is now dusted for fingerprints and other evidence, such as bodily fluids, fibres, hair and other trace evidence. Every print is preserved on a clear sheet of film or, in the case of well-equipped Operatives, scanned directly onto an Oyster computer. Every piece of evidence is catalogued and stored in a sealed container, as with Step 5.

Step 7: Re-check crime scene.

Once the crime-scene is largely finished-with, a final check is made to ensure that no evidence has been missed and that all evidence has been bagged, tagged and recorded.

Step 8: Release crime-scene to Shivers/ Monarch.

Finished, the crime-scene is unsealed and handed over to the Shivers or Monarch officers to clean up. At this stage the Operatives will usually head off to the Morgue to perform any autopsies required or head to the incident room to begin their investigations and process the evidence collected.

What does all this blood mean?

At the scene of many violent crimes there can be a lot of blood. In fact, the absence of blood, especially surrounding an obviously wounded corpse can be very suspicious. Any weapon that cuts or pierces a major blood vessel will result in a deluge of blood sprayed across the scene. All of this blood, from analysis of the blood itself to the patterns it makes when it falls from the victim, can tell a detailed story of what occurred.

For example, the size and shape of drops on a flat surface can tell a wealth of information about how far the drops fell and from what angle. If the drop only falls a short distance the mark will be circular, or elliptical if it struck the surface at an angle. From around 1-2 metres the edge of the mark will be crenelated, with the size of the protrusions increasing with the length of the fall. From a distance of more than 2 metres there are also usually spurts from the side of the main drop. If the drop appears as a stretched exclamation mark, the investigator knows that it originated from a moving source. Additionally, streaks of spurting blood will reveal a major wound, as well as the height and orientation of the victim, and pools of blood can show where the victim fell and died.

Once a blood sample has been discovered, it can give an investigator a wealth of information such as the blood's race of origin, the grouping of that blood within a racial type, and even the collection of DNA for Karma analysis. All of this information can be of great value to the investigator, but remember that on Mort countless people have shared the same living and working spaces, and simply finding blood does not mean that it belongs to the victim or the criminal. It is entirely possible that a well meaning investigator and his squad could spend weeks tracking an innocent civilian or Operative.

Blood from the various races can be analysed and divided into groups depending on the surface structures of the blood cells. In humans (including Frothers), the most commonly used groupings depend on the presence or absence of A and B antigens. This allows humans to be divided into groupings A (containing only A structures), B (containing only B antigens), AB (containing both) or O (having neither).

Determining the racial source of the blood is not always as simple as it may appear. This simplest blood to identify is that of the Shaktar, which aside from being a luminous green also has several unique blood cell qualities from their reptilian origins that are easily observed under a microscope. The blood types of the other races are more difficult to distinguish, ranging from slightly more difficult to greatly increased. The differences between human blood cells and Wraith Raider's are generally clear enough. Both are mammalian but Wraiths have clear antigens not found in human blood. Humans and Ebons (including Brain Wasters) have many similar structures, with Ebons also falling into the ABO blood grouping structure, but the secondary surface structures (theorised to have a role in manipulation of the Ebb) will permit the differentiation of the races with careful investigation. The greatest difficulty for differentiating races based on their blood comes between humans and biogenetics. The biogenetic races are characterised by a constant AB structure, allowing them to be able to more readily accept donor blood if required, and to minimise tissue rejection in the case of implantation. As approximately 15% of the human population share this blood typing, it is very difficult to differentiate between the biogenetic and human races. This is where DNA typing must be considered.

Red blood cells of humans and Stormers contain no DNA, their nucleus having been ejected as the cell matures. This means that in order to distinguish between Stormer and human blood, white blood cells must be recovered. White blood cells are responsible for part of the immune response of these races, and are generally more numerous in Stormers than in humans, but not so much that they can be distinguished on this alone. Once these cells are recovered in a blood sample the cells may be treated and the DNA isolated and examined. At this point (which may take several days to complete) it is a simple matter to see if the blood came from a Stormer or a human. Due to the engineering inherent in their creation, Stormer's genetic codes are much more refined and pure than human, which bares much unnecessary junk DNA from millennia of breeding and evolving. More information can be gained from DNA as will be discussed later.

As well as being useful in blood identification, many of the blood groupings and other identifying factors of races can be found in other body fluids. Approximately 80% of the mammalian races secrete the proteins and surface structures of their blood in their other fluids, such as tears, sweat, saliva, semen, and vaginal fluids. Semen if collected promptly, can also yield DNA evidence as mentioned for white blood cells. Shaktar do not produce this secretion due to their reptilian origins.

Trace evidence.

Trace evidence is evidence that is found at a crime scene in small but measurable amounts. Examples of typical trace evidence include hairs, fibres, soils, botanical materials (moulds, moss, seeds, spores), gunshot residue, explosives residue, and volatile hydrocarbons (arson evidence). Trace evidence can be found anywhere; in the tread of a victim's boot, ground into a carpet, in cracks in the floor. Each of these traces tells its own story about what happened at a crime-scene, and it takes a good forensic investigator to weave each of these stories into a coherent picture of what happened. A few spores of a unique moss might be found at a murder scene.; how did it get there? Did the murderer bring them there in the tread of his shoes? If so where does the moss grow? Those spores might prove to be the link that breaks the case.

Example trace evidence and area of origin:

| Trace | Where? |
|--|--------------------|
| Yellowtongue moss spores | Uptown |
| Roofleech eggs | Downtown |
| Mud containing lubricants and pollutants | The Mort Spaceport |
| Carrien dung | Cannibal Sectors |

People can be identified by their fingerprints, from traces of their DNA, by DNA fingerprinting, from their teeth or bite patterns through forensic odontology, from a photograph or a video recording by facial recognition systems, from the video recording of their walk by gait analysis, from an audio recording by voice analysis, from their handwriting by handwriting analysis or even from the content of their writings by their writing style (eg. typical phrases, factual bias, and/or misspellings of words).

DNA identification must be done by an extraction of DNA from substances such as:

- * Personal items (toothbrush, razor, etc)
- * Banked samples (banked sperm, biopsy tissue, LAD samples)
- * Blood kin (biological relative)
- * Human remains previously identified

Documents are characterized by the composition of their paper and ink.

Typewriters can be identified by minor variations of positioning and wear of their letters.

Paper shredders can be potentially identified in a similar way, by spacing and wear of their blades.

Colour copiers and colour computer printers steganographically embed their identification number to some printouts as a countermeasure of currency forgeries.

Copiers and computer printers can be potentially identified by the minor variants of the way they feed the paper through the printing mechanism, leaving banding artefacts.

Social networks can be discovered by network analysis of banking, telecommunication and postal records.

Radio transceivers can be potentially identified by minute variations of their output signal.

Cars can be automatically found on CCTV records by automatic number codeplate recognition (a standard system throughout Uptown and Suburbia, available in places in Downtown).

Computers connected to the WP-web can often be identified by their unique serial (IP) address.

Sometimes, manufacturers and film distributors may intentionally leave subtle forensic markings (digital watermarks) on their products to identify them in case of piracy or involvement in a crime.

The Ebb and Forensics.

The Ebb is both a boon and a curse to the world of Forensics. Ebons and Brainwasters can use their abilities to great effect in crime-scene investigation; using Telekinesis to levitate over areas, avoiding leaving footprints in evidence; they can use Detect to tell if an Ebon or Brainwaster was at the scene of a crime; they can use Ebb Sense to see and feel things other forensics officers would miss.

But Ebb powers can also be used to make a crime-scene virtually impossible to interpret. Telekinesis can be used to levitate murder weapons, eliminating fingerprints; Reality Folding can be used to enter locked rooms and leave again without leaving a trace; Red and Blue Thermal and Blast can be used to kill victims in manners that leave very little in the way of unique signatures.

Generally, if Ebb powers have been used in the course of a crime that requires forensic investigation, then the Operatives doing the investigating had better have an Ebon or Brainwaster in their squad. Either that or go hire one who doesn't mind renting out their services.

“Roger Control, Male victim, apparently blown open with some kind of explosive. No prints or GSR on the body, awaiting Ebb clarification.”
“Let me see. Hmm. Yes, I can sense a Brainwaster was here. He used Blast to kill the subject. He is strong, but no stronger than I. I have his scent now.”

“Control, Ebb support has the trail, we are now proceeding on foot after the suspect.”

- Report by Operative Jay Wiseback SCL 8A. Ebb support provided by Ebon Operative Shine SCL 9.5A

Sometimes Ebb crimes clearly advertise the fact that they were the work of an Ebon or Brainwaster (or even a Necanthrope), by the very fact that there is no regular evidence such as fingerprints, gunshot residue or point of entry. Identifying an Ebb crime is the easy part; finding and apprehending the criminal is the trick...

The loneliness of death is fleeting.

When a body is dumped somewhere, it won't always stay in that location. Assuming a body is dumped in a fairly obvious place (back alley, behind a dumpster, etc) the following averages apply:

Uptown

Time before body is discovered: Short (within an hour). Uptown is patrolled by Shivers and in general the population dislike bodies lying about, stinking up the place. A lot of murders happen in Uptown and the bodies are then dumped in Downtown or into the nearby sewers.

Likelihood body is untouched before forensics arrive: Good. Most Uptowners wouldn't want to get dirty by touching a corpse. Cockroaches and smaller insects are likely to colonise any body left for more than an hour, as well as the occasional rat.

Suburbia

Time before body is discovered: Short (within 6 hours). Suburbia has it's patrols of Shivers and gangs of kids that roam the blocks looking for something interesting to do. One or the other will usually find any obviously dumped bodies within a few hours and report it in.

Likelihood body is untouched before forensics arrive: Good. Although neighbourhood kids will probably poke a body with a handy stick, they won't usually disturb the corpse. Sometimes smaller valuables will 'fall off' the corpse and find their way into children's pockets, so Shivers are quick to frisk any kids who report a dead body. Suburbia tends to be reasonably free of pests, so the largest scavengers are usually rats, who will arrive to pick at a corpse after a few hours. Cockroaches and smaller insects will usually arrive and colonise a body after around an hour.

Downtown

Time before body is discovered: Medium (within a day). Dntowners, despite what Uptowners might believe, still have some morals and will usually report a body when they find it. Whether the Shivers do anything about it when it's reported is another matter. The main reason bodies can go undiscovered in Downtown is due to the amount of alleyways and dumpsters that a body could be dumped in, and the lack of active patrols.

Likelihood body is untouched before forensics arrive: Average. Depending on where in Downtown the body is dumped, contamination of the corpse can vary from limited looting of minor effects (watches, rings, etc) to the stripping of clothes and even gold teeth. Pests such as rats, mice, cockroaches and the occasional Carnivorous pig will also take the opportunity to snack on any handy bodies they can get access to, often moving in within an hour of the body being dumped.

Lower Downtown

Time before body is discovered: Long (several days). The residents of Lower Downtown have more to worry about in their own lives than a dead body cluttering up an alleyway. It is unlikely a body left in Lower Downtown will be discovered within a day of being dumped. Usually the only time bodies are reported is when the smell gets too bad.

Likelihood body is untouched before forensics arrive: Poor. A body dumped in Lower Downtown will be at the mercy of rats, cockroaches, Carnivorous pigs and anything else that's snuck into the area from the Cannibal Sectors or the catacombs. These scavengers will descend upon the body within an hour of it's arrival.

As well as this the population of Lower Downtown will usually strip the body of anything valuable within minutes and sometimes even take the body itself for other, darker, reasons.

The only chance of finding an untouched body in Lower Downtown is when it's dumped somewhere inaccessible to the majority of the population.

Sewers

Time before body is discovered: Long (weeks). The only time bodies dumped in the sewers are discovered is when a maintenance team or squad of Operatives on a Blue come across them during another assignment. Once in a while a body may get jammed in a garbage mangler or outflow pipe, and the resulting blockage may result in a BPN to clear it, at which point the body will be discovered.

Likelihood body is untouched before forensics arrive: Improbable. Being suspended in sewage or stagnant rain water for any length of time will damage the body, and the sewers are home to all forms of scavengers that will flock to a body and usually strip huge chunks of flesh from it. Some bodies are dragged away by the Carnivorous pigs that inhabit the sewers, and will end up as scraps of bone littering their nests. Carrien also inhabit the sewers, and rarely pass up the chance of reasonably fresh meat.

Catacombs

Time before body is discovered: Very long (months). The catacombs beneath Downtown are rarely visited by anyone from above, so bodies that find their way down to the lower depths are rarely found except by Operatives on Green BPNs or similar.

Likelihood body is untouched before forensics arrive: Average. The catacombs, despite being below the sewers, are usually empty of most life, including larger scavengers. Small mites and beetles will eventually colonise the corpse, but not in great numbers. The catacombs are usually quite dry compared to upper levels, and so many bodies will mummify rather than decompose.

Cannibal Sectors

Time before body is discovered: Never. The Cannibal Sectors are so hostile and teeming with voracious life-forms that a body dumped there will vanish almost within hours. The only chance of discovering a body within the CS's is if an Operative squad happens across it before anything else does.

Likelihood body is untouched before forensics arrive: Laughable. As stated above, the amount of flesh-eating life-forms that inhabit the Cannibal Sectors mean that most bodies will be reduced to scraps within hours. Acid rain and environmental conditions will further eliminate any other evidence.

Departments & People.

Morgues on Mort.

On the whole the only morgues on Mort are few and far between; maybe two or three per sector. Bear in mind how large a sector is, and how many dead bodies each sector produces each day, and you'll understand why some forensic teams lament this statistic.

On Mort, where the constant rain causes bodies rot quickly, and very few people care how anyone dies unless it's on TeeVee, the dead receive little more than passing interest and are buried, disposed of or recycled as fast as possible. Usually a corpse only spends a significant amount of time in a morgue if it is the subject of interest; either because of an active BPN, medical research or other, darker, reasons.

Shiver morgues

Shiver morgues are usually located under Sector Precinct houses, or if not nearby to one. They tend to be dark, echoing structures, with stark examination rooms and high narrow windows.

Bodies that end up at Shiver morgues are usually murder victims, or those found in suspicious circumstances.

Storage available: Shiver morgues feature robust and functional refrigeration units that will preserve a body (preserve it in the state it is put into the unit, that is) for almost a year before the tissue becomes unusable due to cellular breakdown.

Storage time: As standard, bodies are held at a Shiver morgue for a maximum of 7 days unless they are retained under special orders (usually due to a BPN).

Hospital morgues

Hospitals on Mort maintain their own morgues, primarily for the storage of donor stock and those poor unfortunates who expire on hospital property (who shortly afterwards become donor stock). At times the bodies of murder victims will end up at a hospital morgue rather than a Shiver facility, usually if the Shiver morgue is overloaded.

Storage available: Hospitals are equipped with cryogenic tanks for the storage of donor samples, which can freeze organs or individual limbs almost indefinitely. These are not usually suitable for preserving whole bodies, however.

They also usually possess a number of refrigeration units, but these are only used to preserve bodies for a few days until they are carved up into donor stock. At the most, one of these units could only preserve a body for a month before cellular breakdown resumes.

Storage time: Hospitals dislike holding onto bodies they can't cut up for their own use. Unless ordered, or presented with a BPN, they will dispose of unwanted bodies after only 3 days.

Karma facilities

Karma retain extensive and sophisticated facilities that, in the broadest sense, could be called morgues. If a corpse arrives at a Karma lab and Operatives turn up expecting free use of the facilities, they are in for a shock.

Karma staff almost always outrank operatives, and usually make that fact blatantly clear. In the rare times an Operative team outranks local Karma staff, they find themselves treated with icy disdain and grudgingly aided.

Storage available: --D-NOTICE: SPECIFICS OF KARMA EQUIPMENT RESTRICTED --

Storage time: Indefinite. Karma technology can preserve corpses for as long as required.

Necropolises

Necropolises are the towering sepulchres where the people of Mort (those with money enough to do so) lay their dead to rest. The tomb-cities are mostly made up of small burial compartments, but significant portions are given over to the preparation and preservation of newly-arrived corpses. Sometimes bodies not yet due for interment arrive at these facilities.

Storage available: Necropolises have vast racks of preservation vaults, for the storage of thousands of bodies at a time. These vaults are not intended to arrest decay, however, merely delay it. A body stored in such a vault will remain preserved for around 6 months before they cellular resume breakdown.

Storage time: Bodies are held at Necropolises until they are interred. Bodies not due for interment will be held until they begin to decay. Necropolis staff seldom care who they store; one dead body is the same as another to them.

Forensic staff

Operatives will encounter a range of forensic staff around Mort, especially if they go after forensic cases themselves.

Operative Forensic specialists

SLA Operatives who have trained in forensics are usually reasonably skilled at what they do and, if successful enough, very well equipped. Operatives will not usually aid other Operatives from outside their squad unless they are friends or are calling in a debt, but some extenuating circumstances occur.

Forensic Shivers

Forensic Shivers are part of the small Forensic Medical Corps. They wear lightly armoured Shiver-green smocks and helmets with enhanced optics, and carry browbeaters and minimal forensics kits as standard.

If Forensic Shivers are in charge of an investigation, then minimal work will be done to try and get the case solved.

Generally they are so overwhelmed by work they cannot spend too long on any one case. Some resent this, wishing they could do more good. Others rarely care.

When an Operative takes over a case from Shivers, they are usually relegated to grunt-work like collecting fingerprints and tissue samples.

Shiver morgues are staffed by Forensic Shivers; usually the higher ranking officers who no longer want to do field work.

Karma technicians

Some Karma are trained in Forensic analysis, for reasons best not discussed. They are highly skilled and often carry advanced equipment unavailable on the open market. It is rare when an Operative ends up working with a Karma technician on a standard BPN, but when they do they usually struggle to maintain control of the investigation.

Chapter 3: Back in the lab.

The signs of death.

There are five stages that clearly indicate a person has shuffled off the mortal coil, and each has its own use to forensic investigators. When a body is discovered, the attending forensic officer will judge which of the stages the corpse exhibits, and work out from that how long it has been since the person died.

1. Pallor mortis

Pallor mortis is a postmortem paleness which happens almost instantaneously (in the 15–120 minutes after the death) because of a lack of capillary circulation throughout the body. Paleness develops so rapidly after death that it has little to no use in determining the time of death.

2. Algor mortis

Algor mortis is the reduction in body temperature following death. This is generally a steady decline until matching ambient temperature, although external factors can have a significant influence (the victim wearing insulating clothing will slow cooling for example).

A measured rectal or liver temperature can give some indication of the time of death. The normal temperature of a human will decrease from 37°C at death by around 1°C per hour for the first 12 hours after death, dropping to about 0.5°C per hour for the next 12 hours. Of course, this temperature change relies on the temperature of the location and the amount of insulation wrapped around the body, as well as the size of the body.

Although a sub-classification of the human race, the average Frother has a slightly elevated temperature compared to the average human. Due to the centuries of controlled breeding and ingestion of company drugs, the Frother's metabolism has been coaxed into burning just a little hotter than the norm, and the usual resting body temperature will be about 37.5–38°C.

The Ebon species, and its offshoot the Brain Wasters, are another race that demonstrate marked temperature differences despite sharing similar backgrounds. An Ebon possesses a body temperature slightly cooler than a human, at 35°C, and a Brain Waster, due to their high metabolism and hyperactivity experiences a remarkably different baseline temperature of 39°C. With those ebb users that have evolved into the Necanthrope state, it is impossible to give generalities of body warmth. Necanthrope temperatures have been recorded in as great a range as room temperature all the way up to 50°C. One notable specimen even consistently delivered a temperature that was 8°C cooler than the ambient temperature. None of the individuals tested reported any discomfort from their conditions. In all Ebb-user cases, the presence of a deathsuit delivers excellent insulation and greatly reduces the rate of cooling of the body, doubling or tripling the calculated time lapse since death.

A comparison of the alien species of the Shaktar and Wraith Raiders reveals almost opposite ends of the evolutionary spectrum. On one side the Shaktar are a reptilian species, evolving on the warm tribe worlds. This has resulted in a cold-blooded race that relies on ambient temperature in order to absorb body warmth and power their cellular metabolic processes. It is interesting to note that Shaktar isolated in cold environments do not display much of the sluggish behaviour expected by reptiles. It has been theorised that the large aliens are able to store sugars in an energy-enhanced form within certain body sections, notably the dreadlock-like tendrils extending from their heads. Regardless of the actual cause of their adaptation, it is impossible to determine the time of death of a Shaktar from the temperature of the corpse. In most cases the body will be at room temperature, increasing slightly after two to three days as bacteria begin to decompose the tissues of the body, especially those energy rich tissues.

On the other end of the spectrum, Wraith Raiders have followed a curious evolutionary path. Although their race has developed on bitterly cold ice worlds such as Polo, the feline-like creatures do not possess the thick, insulating layer of fat expected from most arctic creatures. The Wraiths do have a thick coat of fur, which thins dramatically under the warmer conditions of worlds such as Mort, but even this alone would be insufficient to prevent hypothermia and death on a planet as cold as an ice world. The Wraith Raiders have an internal temperature similar to that of humans, around 38°C, and have evolved an incredibly efficient circulatory system for their survival. Like a penguin that is able to minimise loss of heat by restricting blood flow to its feet, a Wraith subconsciously keeps its body heat well within the core of the body, only releasing enough to the limbs and extremities to ensure effective function and survival. This uneven distribution of body heat can make estimation of time of death of a Wraith Raider body difficult. As long as core body temperature is measured, a modified equation can be used. In addition to keeping the warmest blood closest to the centre of the body, the Wraith Raider form has overlapping insulation layers that minimise the loss of this heat. Therefore a dead Wraith Raider will lose 0.5°C per hour for the first 24 hours, which will drop to half this rate for the next 24 hours. This efficiency in heat retention also accounts for the discomfort many Wraiths feel when operating on Mort, and most operative Wraith Raiders will be loathe to remove their coolant suits for extended periods of time, as they can literally suffer and die from heat

exhaustion if they are not careful.

Finally, the biogenetic races are far less interesting from a forensic point of view than could be expected. Each type of Stormer, and the Vevaphon, possess an average body temperature of 37°C, and lose this warmth after death at the same rate as a human corpse would. This is interesting from a research point of view. Certainly Karma could conceivably design them with different body temperatures and has for some undisclosed reason chosen to not do so.

The average ambient temperature on Mort is 12°C, but can rise to 18°C during summer and drop to below 0°C during winter.

3. Rigor mortis

Rigor mortis is one of the recognizable signs of death that is caused by a chemical change in the muscles after death, causing the limbs of the corpse to become stiff and difficult to move or manipulate. Assuming average Mort temperatures, rigor usually sets in about 3-4 hours after death, with full rigor being in effect at about 12 hours, and eventually subsiding to relaxation at about 36 hours.

Times for the onset of rigor mortis can vary from a few minutes to several hours depending on the ambient temperature. Factors influencing rigor mortis include the age and condition of the body, as well as the mode of death and the surroundings. For example, rigor mortis will tend to set in faster in those who were active immediately prior to death.

4. Livor mortis

Livor mortis, postmortem lividity, is a settling of the blood in the lower portion of the body, causing a purplish-red discoloration of the skin: when the heart is no longer agitating the blood, heavy red blood cells sink through the serum by action of gravity. This discoloration does not occur in the areas of the body that are in contact with the ground or another object, as the capillaries are compressed.

Coroners can use the presence or absence of livor mortis as a means of determining an approximate time of death. The presence of livor mortis is an indication not to start CPR, or to stop it if it is in progress. It can also be used by forensic investigators to determine whether or not a body has been moved (for instance, if the body is found lying face down but the pooling is present on its back, investigators can determine that the body was originally positioned face up).

It is also worth noting that livor mortis can give an indication of poisoning by its colour. Carbon monoxide poisoning will show as bright red bruising stains, while cyanide poisoning is revealed by pink colouration. The bruising is apparent in all of the major races and offshoots, but it is more difficult to detect in the Shaktar, and an inexperienced examiner can easily miss the signs of the bruising against the aliens' deeply pigmented red scales.

Livor mortis starts 20 minutes to 3 hours after death and is congealed in the capillaries in 4 to 5 hours. Maximum lividity, when the largest and most obvious marks are clearly visible, occurs within 6-12 hours.

5. Decomposition

The bodies of all living organisms begin to decompose shortly after death as bodily tissues are broken down by its own internal chemicals and enzymes and as it is attacked by bacteria.

Several days after death the bacteria in the body and the environment will have grown enough to produce changes in the corpse. After around two days these bacteria will give a green stain appearance to the sides of the abdomen, which spreads to the arms, legs and neck after another day or two. Following this the breakdown of tissues and the production of gas from the bacteria causes the body to swell, and after a week blisters appear on the skin of the victim. The scales of the Shaktar prevent the formation of the blisters, and the armoured skin of the Xeno holds in most of the swelling and blistering, but otherwise each of the races undergoes the same changes in roughly the same time periods.

Such decomposition can be simplified into two stages: In the first stage, it is limited to the production of vapours. In the second stage, fluidic materials form and the flesh begins to decompose.

The alien races and forensics.

Wraith Raiders and Shaktar don't present as many problems as Stormers when processing a crime-scene, but they do add a degree of alien uniqueness to any crimes involving either of the races. Ebons and Brainwasters, although different to Humans, do not differ that greatly physiologically, and so do not present quite so many problems.

Shaktar, as reptiles, shed scales rather than skin-flakes, which are instantly identifiable. At the same time, Shaktar scales are tough and contain very little genetic information compared to human skin-cells, meaning that they are sometimes less useful to forensic scientists. Shaktar fingers lack fingerprints, but in their place they have their own unique patterns of raised scale flanges that provide grip in the same manner as fingerprints do. These scale patterns leave imprints in exactly the same manner as fingerprints; leaving deposits of skin-oil and dirt in patterns unique to each Shaktar. This means Shaktar can be fingerprinted just like humans.

Shaktar claws also leave very distinct wound patterns, allowing forensic officers to quickly identify victims killed by Shaktar claws. Unfortunately, unlike Stormer claws, Shaktar claws are all very similar and usually fall into one of several categories, meaning any claw-print left by a Shaktar will usually match the claw prints left by 25% of the Shaktar population.

Wraith Raiders have one huge attribute that makes them stand out to forensic science; they are covered in fur. Wraith fur tends to thin out on worlds colder than Polo (that's most worlds in the WOP) and, like most fur-bearing mammals, Wraiths shed their fur almost daily. This means that Wraiths leave a fair amount of DNA evidence behind them, unless they take pains to ensure they don't shed; such as wearing fully-enclosed body stockings or remain inside sealed power-armour. Wraith Raiders have finger ridges similar to human fingerprints, but the tend to be quite uniform. The ridging on their nose pads, however, does tend to be unique. Every Wraith also secretes a unique musk that singles them out to creatures with enhanced senses of smell, such as other Wraith or DAFs and DACs. Wraith claws, tiny compared to the talons of Shaktar and Stormers, leave distinctive wound tracks that are unique to each Wraith Raider.

Ebons and Brainwasters are very similar to humans, both physically and genetically. There is very little about them that makes any great difference to forensic investigations. The only real difference is their use of the Ebb at a crime-scene, which requires the presence of another Ebon or Brainwaster to investigate.

Stormers and Karma.

Stormers, and other Karma produced equipment, also present problems to forensic officers in the execution of their duties. Stormers, grown in vats and made to measure, don't leave much of the DNA and trace evidence that standard forensic science relies on to identify criminals. Stormers don't shed skin cells as often as Humans, Wraiths or Shaktar. Their cellular make-up is also different to most creatures, requiring a different set of procedures to identify any samples they do leave. Their fingers are without fingerprints.

But, by their uniqueness, Stormers also make forensics much easier in some respects. They might not have fingerprints, but the claws of a Stormer are unique to each individual, so any injuries inflicted with them can be matched to the Stormer in a similar manner to fingerprinting. Stormer cells are also very similar to human cells in that every Stormer has unique DNA strands, allowing DNA matching (as long as the forensic officer has the right equipment to extract DNA from the Stormer samples to start with).

Karma gear, such as vat-grown clothing and furniture, also carries its own unique genetic signature. Even if three vat-leather jackets look identical, it would be extremely uncommon for any of the jackets to have been grown in the same vat, meaning each jacket would have a different genetic signature to the others.

Karma also make use of a process called 'cell tagging'; every Karma-grown item has an identifying code worked into its cells that shows where and when the item was grown and its number in the series. Vat-grown leather, DNA-altered Canines, Karma-grown plants, even Stormers carry these tags on their cells, on every cell in their bodies. If intact cells are recovered from a crime-scene then the cell tags can easily be read by anyone with a powerful enough microscope and the knowledge of where to look. These tags can then be referenced with Karma and, in the case of items, the exact date of creation and sale are usually available from their computers. The tags can also tell an investigator where the item/ biogenic was created, which team created it and any unique specifications that were built into the item/ biogenic at creation.

Firearms and weapons.

Many SLA firearms fire caseless ammunition, especially the smaller calibres such as CAF and 10mm auto. Even in this case, many caseless rounds are contained in a plastic wad that is ejected from the barrel when the weapon is fired. Shards of these plastic wads often carry as much information as a gun-brass and can be found scattered around the area of a shooting. They can tell, among other things, what type of gun was used; the ammunition type chambered; whether the gun barrel was modified in anyway with suppressors or silencers. Every gun has its own 'fingerprint' as well, made by unique indentations and striations inside the barrel. These marks are passed onto the bullet when it's fired from the weapon, meaning that a recovered bullet can be matched to the gun it was fired from with 90% certainty.

SLA doesn't keep a large ballistic fingerprint archive, which means that ballistic fingerprinting is usually only used once the suspected weapon is recovered, to confirm it was the weapon used.

There are numerous ways of tampering with ballistic fingerprints, however, and many black-market companies that will supply guns with barrels that leave as few signatures as possible.

The AGB 'Chopper' is an exception to this rule, as they do not fire a chemically-propelled bullet but instead unspool a compressed packet of razor-wire at their target. This leads to very distinctive wounds, but very little in the way of ballistic fingerprints due to the lack of gunpowder. Subtle variations in the way individual Choppers unspool the wire can be found, but determining that a particular Chopper is the murder-weapon in question is nigh-on impossible.

The SP Vibro Disc is similar to the Chopper in that it uses no chemical propellant, using instead gauss rails to fire its projectiles. Vibro Discs do produce ballistic fingerprints, however, due to unique striations in the guide rails that leave distinct impressions on the discs. This allows investigators to link specific weapons to killings.

Shotguns, like Choppers, can also present problems. If loaded with solid slugs a shotgun can be fingerprinted just like a rifle or pistol, but when chambered with scatter-shot they leave no ballistic fingerprint and are virtually untraceable. They still eject the plastic shell casing that contained the shot, but this contains far less information than a normal firearm wad. This has made shotguns loaded with scatter-shot very popular in recent years with Props and assassins who are eager to avoid forensic Operatives tracing them back. In these cases the operatives have to rely on other trace evidence to find their suspect.

Firearms also leave what is known as Gunshot Residue, referred to as GSR by forensic officers. GSR is the vaporised propellant ejected from the barrel of a gun when it is fired, which quickly settles on anything in the surrounding area including the victim, the shooter's hands and the immediate surroundings. GSR can tell a forensic officer which type of weapon was used, what calibre was fired, how close the shooter was to the target and how long ago the shooting occurred. GSR requires heavy scrubbing with soap and water to remove and is invisible to the naked eye, so unless the shooter wore gloves then it is highly likely that the GSR will remain on their skin for a number of days. As they do not use gunpowder Chopper rifles and Disc rifles leave no GSR.

Powered melee weapons leave similar signatures to firearms, but this time on the victims. Weapons such as Vibrosabres, Flick Scythes and Power Claymores all leave distinctive sawing and chewing marks in the flesh of their victims that are unique to each weapon. Again, SLA does not keep an archive of these signatures as thousands of the weapons are manufactured and sold every day on Mort. These signatures can be used to match a weapon to a crime once it has been located, however.

Nonpowered weaponry such as MAC knives, swords and clubs leave their own fingerprints, but these are far more generic and a lot harder to pin down to a specific weapon. In these cases the investigating officers will have to match other factors such as the way the killer held the weapon, or the particular finish of a blade, to find their criminal.

The rate of decay.

The speed with which decomposition occurs varies greatly. Factors such as temperature, humidity, and the season of death all determine how fast a fresh body will skeletonize or mummify. In a roughly descending degree of importance, those factors are:

Temperature.

Heat will make a body decompose faster, cold will slow the process. In extremely dry or cold conditions, the normal process of decomposition is halted, causing the body to be preserved as a mummy. Frozen mummies commonly restart the decomposition process when thawed whilst heat desiccated mummies remain so unless exposed to moisture.

The availability of oxygen.

Lack of oxygen will kill off moulds, bacteria and other organisms vital to decomposition. In a totally airless environment corpses will mummify.

Cause of death.

Different manners of death can encourage or retard the effects of decomposition. Drowning, burning, freezing, irradiation and other similar causes of death will kill off bacteria and slow the rate of decay. Some poisons also kill bacteria as well as the victim, reducing the rate of decay.

Burial, and depth of burial.

The soil of Mort contains corrosive enzymes and usually has a high moisture content, both of which help encourage decomposition. Corpses in shallow graves are likely to rot faster than those buried deeper, due to easier access to oxygen and also more access to scavengers. The skeleton itself is not permanent; acids in soils can reduce it to unrecognizable components in a few weeks.

This said, a buried body will usually decompose at around half the speed of a body left totally exposed to the air. In certain areas of Mort the soil has a high peat content and can act as a preservative, effectively mummifying the body.

Access by scavengers.

Scavengers play an important role in decomposition. Insects and other animals are typical agents of decomposition, if the body is accessible to them. The most important insects that are typically involved in the process include the fleshflies and blowflies. The green-bottle fly seen in Mort's limited summer is a blowfly. If left in the open in areas such as Cannibal Sector 1, invertebrates alone can easily reduce a fully fleshed corpse to clean bones in under a week.

Larger scavengers, including rats, mice, cockroaches, Carnivorous Pigs, stray DACs and DAFs and the other varied feral lifeforms of Mort may eat a body if it is accessible to them. Some of these animals also remove and scatter bones. If the body is left in an area accessible to Carrien then there is little hope that the body will remain long enough for forensic analysis, as the creatures relish such treats and usually drag them away when they find them and consume everything, including the bones.

Trauma to the body.

Any trauma inflicted on the body at the time of death, such as wounds and crushing blows, will affect how the body decomposes. Open wounds allow bacteria to invade deeper into the body than under normal conditions, accelerating decay. Crushing blows reduce the cells in the affected area into soup, allowing bacteria to establish faster than normal, also accelerating decay.

Another point to consider is the wound-causing implement. A knife coated in sewage will introduce bacteria into the wound fast than normal, as will a bite from any animal (or humanoid for that matter).

By studying the heavily decayed areas of a corpse a forensic examiner can tell where wounds were and what inflicted them.

Humidity, or wetness.

Bacteria, chief agents of decomposition, thrive in humid conditions. They dislike too much water, however, and the balance is fine between too much and too little moisture.

Bodies suspended in water (such as drowning victims and bodies dumped in cisterns or sewers) tend to pickle rather than decay, which often preserves evidence for longer than if the body were dry.

On Mort the rain never stops, and so moisture is something all forensic examiners have to deal with. Bodies left in alleyways and other areas exposed to the rain will begin to decompose very quickly on Mort; faster still if the area is somewhere warm, such as an industrial plant or near an air-con outlet.

Body size and weight.

Generally speaking, bodies with more fat on them will decay at a faster rate than those with less, due to bacteria readily using fat stores as food. One interesting variation to this rule is when body fat comes into contact with the alkalis in Mort rain. In certain cases the interaction of these alkalis and the fat can trigger a process called saponification, when the fat and other soft tissue undergo a chemical change into a substance called adipocere or "grave wax"; a solid yellow-white waxy substance. Grave wax begins to form within about a month of death, and can persist on the remains for centuries. The formation of adipocere slows decomposition by inhibiting the bacteria that cause putrefaction, and can sometimes completely preserve a corpse, sometimes in amazingly good condition.

Clothing.

Different fabrics can help preserve a body, especially artificial fibres such as nylon or plastic. If the corpse is tightly wrapped then insects and scavengers will have a hard time getting access to it, as will oxygen which will stop the growth of bacteria.

Karma vat-grown leather is legendary in it's ability to withstand damage and some more expensive examples even regenerate; a corpse wearing such an item would obviously last longer than one wearing nothing.

Some fabrics even attract insects such as clothes moths, which would normally only arrive to feed on the corpse's hair.

Foods/objects inside the specimen's digestive tract.

Some foods naturally contain more bacteria than others. These foods, sitting in the stomach of a corpse, will begin to decompose themselves and add to the speed at which the corpse decays. Usually the decaying food in a corpses stomach will cause it's entire abdomen to swell with gasses, and sometimes even burst; a most unpleasant -and potentially hazardous- occurrence if it happens when forensic examiners are working on the body.

The bodies of newborns who have never ingested food are an important exception to the normal process of decomposition. They lack the internal microbial flora that produce much of decomposition and quite commonly mummify if kept in even moderately dry conditions.

Forensic entomology.

Forensic entomology is the study of insects found at a crimescene (not necessarily on a corpse, but this is usually the case). The presence or absence of recorded species of flies and beetles can help determine information about time of death, location of death and other forensic information. Insects arrive at a corpse in different stages, and the larvae they typically leave on bodies grow in stages (instars), shedding their skin with each growth phase. The speed at which insects burrow through a body can also tell an examiner how long a body has been dead for.

The following are some of the more common insects on Mort that will be drawn to dead bodies. More insects than the following exist, but these are the more common, most widely-spread.

Flies

Flies are often first on the scene. They prefer a moist corpse for the maggots to feed on, as such a corpse is easier for them to chew. The most important families are:

Blowflies are usually the first insect to come into contact with a dead body, usually within hours of its death, during the initial stages of decomposition. They are small metallic-coloured insects and come to bodies to feed on the carrion and lay eggs, which hatch into maggots, feed on the carrion and mature into more flies within 150 hours (6 days). By cataloguing how many maggots, pupa and adult flies inhabit a corpse, forensic scientists can tell how long a body has been exposed.

Fleshflies are similar to blowflies except they tend to be black with white stripes running lengthways along the body. Fleshflies feed on carrion and lay their eggs on bodies, from which hatch carrion-eating maggots. They usually colonise a body a day or so after it first begins to decompose. Fleshflies are larger than blowflies, as are the maggots, and tend to take longer to breed and develop.

House Flies are usually only drawn to a corpse once it has begun to putrefy, usually after several days of decomposition. They only lay eggs on carrion, preferring to feed on rotting vegetable matter themselves.

Bloodflies are large, aggressive insects with blood-red bodies and silver compound eyes. The adults are bloodsuckers and leave large, painful bites on exposed flesh. They are attracted to decomposing bodies as their larvae feed on the maggots of other flies. Bloodflies will arrive at a corpse around four days after initial decomposition begins and lay their eggs, which will hatch into maggots within 12 hours.

Beetles

Beetles are generally found on the corpse when it is more decomposed.

Rover Beetles are elongate beetles with small wing covers and large jaws. They are common inhabitants of carrion, and since they are large, are a very visible component of the fauna of corpses. The adults are early visitors to a corpse, feeding on all species of fly larvae and maggots. They lay their eggs in the corpse, and the emerging larvae also hunt fly eggs and maggots.

Carrion Beetles, Ham Beetles and Carcass Beetles all inhabit decomposing bodies and feed on the rotting flesh. They usually arrive around 2 or 3 days after death. They will not eat skin or hair though, as this is too tough for them to chew and digest.

Hide beetles are important in the final stages of decomposition of a carcass. The adult is a large circular beetle with a hairy brown carapace, the larvae are long and pink with obvious mandibles. The adults and larvae feed on the dried skin, tendons and bone left by fly larvae. Hide beetles are the only beetle with the enzymes necessary for breaking down keratin, a protein component of hair.

Mites

Many mites feed on a corpse. Machete mites are common in the early stages of decomposition, while Tyroglyphidae and Oribatidae mites feed on dry skin in the later stages of decomposition.

Rover beetles often carry Poecilochirus mites on their bodies, which feeds on fly eggs. If they arrive at the corpse before any fly eggs hatch into maggots, the first eggs are eaten and maggot development is delayed. This may lead to incorrect time-of-death estimates.

Moths

Clothes-moths feed on mammalian hair during their larval stages and may forage on any hair that remains. They are amongst the final animals contributing to the decomposition of a corpse, usually only arriving after a corpse has been reduced to bones and fibres by other creatures.

Wasps and ants

The insects in this group are not necessarily necrophagous. While some feed on the body, most are predatory, and eat the insects feeding on the body rather than the carrion itself.

The autopsy.

So you've got a victim's body on your slab in the morgue, now what?

If possible, the investigator should try and determine the identity of the victim. On the scene this can be as simple as checking the obvious records such as SCL or Finance cards. Most other identifying features, such as DNA tattoos, scars or other unusual features will have to be recorded and compared to databases such as employment and medical records. If these features are not recorded at the scene, they will almost definitely be noticed during the autopsy.

The autopsy can give a wealth of information about the corpse and the circumstances surrounding the death. Even if the body is decayed to such a degree that only a skeleton remains, a lot of detail such as race, age and sex, general state of health, physical size, and serious wounds can be determined from the skeleton. It can also reveal subtleties like racial offshoots, such as the differences between white and Orientan humans. Skeletal remains can also give clues to identity through dental records, and pulp can be drilled from teeth for DNA testing. As well, a person skilled in facial modelling techniques can sculpt muscle shapes back onto a skull, giving an indication of what the victim may have looked like in life.

The first stages of the autopsy include weighing and measuring the body. Clothing and armour are examined for any cuts or holes, after which they are stored in bags. Scrapings from beneath the fingernails of the victim are taken and stored, as are samples of body hair, saliva and other bodily fluids, and swabs for DNA analysis. Once the surface features are examined and recorded and the samples are collected, the autopsy can move on to a deeper investigation. The body is opened and examined, noting any evidence or scars left by such events as illnesses, operations and injuries. The stomach contents are examined and analysed for evidence of poisoning, in which case the liver is removed and weighed to estimate how much poison was ingested. Over the course of the examination many of the body's organs are removed and inspected. At the end of the autopsy these organs are placed into a biohazard bag and sewn back into the corpse.

Chapter 4: Evidence is everything.

Guilty until Proven Innocent.

The fact you've been arrested by either Shiver or an Op must mean that you've done something wrong or are high on their list of suspects, there is technically no limit of time they can hold a suspect without charge. However, suspects are allowed to sue for loss of income and productivity, can request a lawyer at any point (Unless on charges of treason, terrorism and breach of contract- subject to IA interrogators discretion) and that's usually enough to keep people moving through the system.

Monarch are contracted, the same way Ops are contracted to look after BPNs, as an outsourced security service under contract to SLA but their arrests, warrants and ability to detain suspects is limited to SCL11's and Civilians. Its not so much that the Monarch employees don't know very much about their legal procedures under the SLA securities contract (because they don't!) but the threat of litigation from anyone with a real job that stops them from bothering anything more than litterbugs, jaywalkers, shoplifters, bums and hookers.

Lawyers

Better get a lawyer son, better get a real good one. Because without him/her you're walking a fine line between a happy, successful career and being financially fucked into poverty until the end of time.

Think of them as Armour and a Big Gun

People don't mess with someone with a big set of f-off guns and armour and the little annoying things like civilians, low level employees, unemployed, crackheads, bastard children and ex-wives out to skin your arse for a few thousand unis. You can quite happily walk through the pits and perils of the legal equivalent of a Downtown slum without getting a bollocking. Of course, if word gets out that you're not packing a 10gauge lawyer and Doggybone legal team... they're going to be all over your arse like herpes (the spotty kind that stays with you for life), especially if you've got money and especially if you can keep puking out money on demand like a credit dispensing pinyata for anyone with so much as a stick to whack on the way past.

Op's/CK's need lawyers like they need armour, you don't have one, you're going to get raped in court. The best source of a lawyer is someone with a financier, they have the SLA-Info skill at enough level to get you through most things as well as the SCL to 'muscle' around lesser SCL11 lawyers, work out sponsorship contracts in your favour and generally look after the squad from legal assaults in much the same way as an APC keeps out irritations like bullets.

Should your squad be unlucky enough to have an operative financier, you're going to have to either get one that is either there as on-call legal help for a financial monthly retainer or if your really lucky the squad financier who gets them BPNs and a 10%er might be able to look after them... for a price.

Financiers are something of a misnomer. Most of the ones a player operative have anything to do with specialise in BPNs and contracts with sponsors. The vast majority are prowling around as freelance lawyers for hire, financially gunning down and being gunned down in courts as hired legal reps, but most are hired by Departments for the various all and sundry things that an entire department has to deal with on a daily basis- contracts with suppliers, legal contracts with employees, issuing sponsorships, advertising contracts etc... etc... But they know who owns them and departmental legal teams are about as much fun as jumping naked into a tank of lemon juice full of piranhas and razor blades.

They're big, they're fiendishly clever... they're evil, have no morals and they will wreck your arse.

When hiring a lawyer, buy the best one you can afford and don't buy one that's a pussy who's clever, get the most utterly evil bastard with no moral conscience you can find.

Expect to pay much the same as CK's demand for an appearance for the top ones and like CK's, they'll fuck anyone for a buck.

Courts

Look on the bright side, you aren't under Cloak/IA detainment, you've been charged, you might even be guilty but you're not completely fucked... yet.

The magistrate in court is an IA full time employee, he/she's a lawyer and knows the SLA legal system and punishments like the back of their hand. Most if not all are incorruptible types who are brutally efficient and not wasting too much time which costs SLA money.

Jury? Fuck off, this isn't your constitutional judged by your peers 'thing' you horrible little guilty cocksuckers, you (or hopefully your lawyer!) plead the case before the magistrate and he/she makes up their mind what will become of it and if you're guilty, fines, punishments etc...

Think of it as being put under close examination by Management for goofing off at work, fair doesn't come into it and you only get ONE CHANCE. There is NO APPEAL.

Particularly difficult cases which might take a lot of time are presided over by up to 6 magistrates, but that's the kind of stuff you really don't want to have anything to do with like liquidating an entire department, division or contract.

The kind of stuff that gets several trillion people retrenched/killed, affects millions of planets and more credits worth of stuff bandied around than some shithead SLOP can imagine.

Blue Petty Courts

BPC's deal with all the nit-picky things like failing to pay traffic infringements, road violations, trespass, unlicensed prostitution, minor theft, damages, non lethal assaults, liability cases, disputes and other irritating things.

1 magistrate and the average turn around time of about 10mins for most things.

Most of the fines here are anywhere between 10u to 10,000c, jail time of around 1week to 20years, they don't tend too issue out capital punishment very much, unless of course you think of an ongoing weekly payment of 100u to an ex-wife as a death sentence.

Red Felony Courts

RFC, this is not a good place to be. This means you're being hauled up for something horrible like murder, extortion, kidnapping, rape, serious assaults, manslaughter, espionage, organised crime, mutiny and basically anything which is going to cost either you or SLA more than 10,000c to resolve. Their role also includes the Militia discipline in most cases simply because of cost and nature of their work.

Fines here can be horrendous

Sent to a loony bin

Gaol sentences to colony worlds for 10yrs to life

Death sentences

Punishment Battalions (cannon fodder)

Indentured services to SLA for life (slavery in other words kids)

But look on the bright side, if it's more productive for SLA to work you to death in a haz-chem facility moving sloping buckets full of noxious goo or mining dirt, they wont kill you!

Black Room Tribunal

BRT... well, on the upside, there's no messing around with lawyers and indeed you'll be very lucky to find a lawyer who'd actually speak to these magistrates with any kind of certainty of getting your ass out of the hole in time.

Terrorism, Treason and Breach of Contract

This is out of your hands as basically IA will have sent Cloak out to investigate the case, report back to the magistrate in charge who will issue the arrest warrant if you're part of the case for further 'investigation/interrogation' or termination if they think the crime is proven.

It's really up to the magistrate if you get a lawyer or not which might be critical for further info, you can bet he wont be happy about Cloak coming around to pick him up too either!

Contrary to popular belief, Cloak don't wander around making up the law and just capping bitches, it all goes by the book; the IA book and essentially if its reached this point your only hope is IA like you or you know someone in Head Office because that's the only people IA will listen too.

They mostly investigate and judge ops, terrorists, turncoats and serious threats to 'SLA interests' from either an economic or military threat.

Corporate-Contract Courts (CCC)

This is mostly the big boys pit of teams of lawyers going at it over inter-company trade agreements and contracts, sometimes if its critically important the magistrate will be from Head Office. It is also not somewhere an Op ever wants to be, either as a guilty party, giving evidence or forbid... taking on a Dept.

While they're as efficient as most other courts the bun-fights can go on for some time, but that just tends to irritate the magistrate(s) if neither side has a well prepared case in the first place.

These are the places where departments live, die and sponsorships sort of slop out of.

Mechanics

Firstly, if you're going to end up here, don't try to intimidate the magistrate(s). They don't like that at all, they dislike bribes as well because even just offers of it can get them killed, but blackmail might not be out of the question if you're willing to run that razorblade.

You don't even have to appear in courts, in fact due to the fact you're probably either in some dank pit, working or have evidence which the lawyer cannot submit on your behalf through an affidavit.

Two lawyers go in, maybe an admin assistant each and the magistrate, NO one else, not the press or media in here at all.

This is a SLA-Info roll 2D10 + SLA-Info skill + help* verses an opposed SLA-Info roll from the other side.

**Help*

This modifies the roll and is what a legal team uses to screw the other side over. For every +1 member of a team they get to modify their SLA info roll by +1.

Needless to say, this gets ugly if one side has a hundred members of their legal team helping out their top-gun lawyer... and the other side doesn't! It also costs the earth and takes time to accumulate, research and compile all that data.

SLA corporate law isn't about being fair, its not about justice, its simply as efficient and in the best interests of SLA, SLA employees and getting the job done as quick as possible.

Biased?

You better fuckin believe it!

On the upside to all this is that it is one of the most efficient things in SLA or would be, however it is also under very heavy demand constantly which makes it very slow unless the demands are prioritised. Demands are prioritised by their importance to the company and security.

For GM's, this is for you when basically you're sick of the Ops running around shooting the place up, torturing people and playing silly buggers with department sponsorships. Nothing will crush them and render them utterly destroyed quicker than a succession of legal cases eating away at their money, time and friendships to bail them out of the shit all the time when they're being constantly flying loose and low with SLA.

The use of evidence in BPNs.

So once forensic evidence has been recovered from a crime-scene, what next?

Well, assuming that the crime-scene was for a murder or similar, the Operatives can now use the evidence to piece together what happened, who did it and how. As if it were really that easy. TeeVee crews love forensic cases, but quickly get bored if Operatives take too long to reach a conclusion. Similarly BPNs often carry time limits, and should Operatives take too long mulling over evidence they may find themselves facing a SCL drop or a pay cut.

Once the evidence has been processed the Operatives should have a pretty good idea of who they are after, and also have the necessary proof to bring the suspect to court and have them convicted.

Many White BPNs carry a Dead or Alive clause pertaining to murders, but rapist, kidnappers and other criminals are usually expected to be taken alive for trial. If the suspect resists arrest then a 'street execution' is considered acceptable, although evidence proving the suspect was indeed guilty is vital to avoid later legal complications.

Most forensic evidence is used in Red Felony Courts for cases pertaining to murder, kidnapping, rape, serious assault and manslaughter.

In these cases the forensic evidence is presented by the prosecution (or in the case of well-trained, media-savvy Operatives, themselves) as a means of verifying their case. The more forensic evidence, the more likely that the suspect will be found guilty.

Blue Petty Courts can sometimes use forensic evidence, but the nature of the crimes handled in BPCs and the speed of the court process usually limits the importance of forensic evidence in these cases. BPC magistrates often get irate if an Operative pulls out a wad of forensic evidence for something as simple as a burglary.

Chapter 5: A view from the dark side.

Serial killers.

Sometimes, most times, murders are committed by someone forced into unusual or stressful situations; the husband who returns from work to find his wife in bed with the pizza delivery guy; the beaten wife who finally snaps; the worker who just can't take his boss any more.

Crimes of passion or opportunity that probably won't be repeated by the murderer.

But some times, that person finds that killing is like a drug; a drug they want more of.

So begins the life of a serial killer.

The motives of serial killers are generally placed into four categories: "visionary", "mission-oriented", "hedonistic" and "power or control"; however, the motives of any given killer may display considerable overlap among these categories.

Visionary

Visionary serial killers suffer from psychotic breaks with reality, sometimes believing they are another person or are compelled to murder by entities such as Mr Slayer or TeeVee characters. Such killers cannot see their own actions as wrong, and often consider their own lives forfeit in the pursuit of their 'quest'.

Mission-oriented

Mission-oriented killers typically justify their acts as "ridding the world" of a certain type of "undesirable" person, such as homosexuals, prostitutes or aliens; however, they are generally not psychotic. Some see themselves as attempting to change the nature of society, often to cure a societal ill.

Hedonistic

This type of serial killer seeks thrills and derives pleasure from killing, seeing people as expendable means to this goal.

Psychologists have identified three subtypes of the hedonistic killer: "lust", "thrill" and "comfort"

Lust

Sex is the primary motive of lust killers, whether the victims are dead or alive, and fantasy plays a large role in their killings. Their sexual gratification depends on the amount of torture and mutilation they perform on their victims. They usually use weapons that require close contact with the victims, such as knives or their hands. As lust killers continue with their murders, the time between killings decreases or the required level of stimulation increases, sometimes both.

Thrill

The primary motive of a thrill killer is to induce pain or create terror in their victims, which provides stimulation and excitement for the killer. They seek the adrenaline rush provided by hunting and killing victims. Thrill killers murder only for the kill; usually the attack is not prolonged, and there is no sexual aspect. Usually the victims are strangers, although the killer may have followed them for a period of time. Thrill killers can abstain from killing for long periods of time and become more successful at killing as they refine their methods. Many attempt to commit the perfect crime and believe they will not be caught.

Comfort

Material gain and a comfortable lifestyle are the primary motives of comfort killers. Usually, the victims are family members and close acquaintances. After a murder, a comfort killer will usually wait for a period of time before killing again to allow any suspicions by family or authorities to subside. Poison, most notably arsenic, is often used to kill victims. Female serial killers are often comfort killers, although not all comfort killers are female.

Power/ control

The main objective for Power killers is to gain and exert power over their victim. Such killers are sometimes abused as children, leaving them with feelings of powerlessness and inadequacy as adults. Many power or control-motivated killers sexually abusing their victims, but they differ from hedonistic killers in that rape is not motivated by lust but as simply another form of dominating the victim.

Case files.

Mort loves serial killers; they make great teevee viewing. Over the years there have been literally thousands of serial killers on Mort; below are the profiles and stats for three example killers.

Eugene McCormick (Visionary killer)

Eugene was a dull and uninteresting sanitation worker from downtown sector 2623. During his life he had worked as a postal worker, monarch enforcer and spent several periods unemployed. No one considered the fat, balding man in his late 30s to be anything other than he seemed. One day, apparently after an argument with a neighbour, Eugene snapped. He went out and stalked and murdered three women, stabbing each to death with a kitchen knife.

Over the next 3 years Eugene murdered over 17 people; mostly women. His preferred victims were usually couples in their cars, who he shot or stabbed to death.

Eugene took to leaving cryptic notes to the Operatives chasing him, taunting them and challenging them to stop him. He was finally captured, after a highly televised 18 month investigation. When asked why he killed, McCormick explained that he had been receiving orders through his dog, which was a conduit to 'The Other Space'. Within the Other Space, so McCormick believed, existed an entity called the Feeder, which demanded sacrifices in the form of murders. Eugene McCormick was executed via vivisection on live TeeVee, drawing record audiences.

Quote: *"I have orders! Orders! It's not my fault you have to die! STOP LOOKING AT MEEEEEE!"*

| | | | |
|------|---|------------|-----|
| STR | 5 | Initiative | 2,4 |
| DEX | 5 | Armour | 3 |
| DIA | 6 | Total HP | 10 |
| CONC | 7 | | |
| CHA | 5 | | |
| COOL | 8 | | |
| PHYS | 5 | | |
| KNOW | 7 | | |

Skills: Blade 1-H 4; Detect 4; Hide 4; Pistol 3; Sneaking 5; Survival 1; Tracking 2; Unarmed 1

Weapons & Equipment: Padquil Flak Vest; civilian knife, CAF pistol

Alden Lean (Lust killer)

Alden Lean, a handsome young man from Suburbia, was searching for his perfect fantasy lover; beautiful, submissive and eternal. He dated countless women, but rejected every one when they failed to meet his expectations. As his desire increased, he experimented with drugs, alcohol and exotic sex. Finally he crossed the line and killed one of his lovers in the throes of passion and found that, for once, he felt satisfied.

He soon began regularly luring victims home from nightclubs and raping, torturing and murdering them. His increasing need for stimulation was demonstrated by the dismemberment of victims, whose heads and genitals he preserved in alcohol and kept under his kitchen sink. He experimented with cannibalism to "ensure his victims would always be a part of him". He was permanently assigned to a penal battalion on Dante, and is assumed to have died when his unit was ordered to assault a Thresher command enclave.

Quote: *"Look at you; so perfect. So pure. I bet you'll fucking scream. Scream for me!"*

| | | | |
|------|---|------------|-----|
| STR | 6 | Initiative | 2,4 |
| DEX | 6 | Armour | -- |
| DIA | 5 | Total HP | 12 |
| CONC | 5 | | |
| CHA | 7 | | |
| COOL | 5 | | |
| PHYS | 6 | | |
| KNOW | 5 | | |

Skills: Blade 1-H 2; Detect 4; Diplomacy 3; Persuasion 4; Seduction 5; Torture 5; Unarmed 3

Weapons & Equipment: Civilian knife, nice clothes, extensive set of torture implements

Sweet Agony (Thrill killer)

Sweet Agony was a SCL 9.4A Kick Murder operative with a fairly impressive list of completed BPNs until he failed a routine psych evaluation. Removed from active service, Agony spent his days lounging around his apartment and his nights brutalising local prostitutes. Slowly his aggressive behaviour increased and his mental balance deteriorated and he began murdering the girls whose services he purchased. After paying for their services, he would kidnap and rape them; he would then drive them to an abandoned industrial complex in Downtown where he would then release his victim to stalk and kill her.

A BPN to deal with Agony was finally raised, and he was eventually tracked and killed by a team of Operatives, but not

before he had fatally injured half of the squad.

Quote: *"Run, bitch! RUN! Hahahahaha!"*

| | | | |
|------|----|------------|-------|
| STR | 10 | Initiative | 1,2,3 |
| DEX | 10 | Armour | 7 |
| DIA | 6 | Total HP | 20 |
| CONC | 6 | | |
| CHA | 5 | | |
| COOL | 9 | | |
| PHYS | 10 | | |
| KNOW | 6 | | |

Skills: Intimidate 4; Unarmed 4; Detect 5; Tracking 6; Sneaking 5; Hide 6; Rifle 4; Auto/support 4; Blade 1-H 4

Ebb: Protect 5; Red Thermal 3; Detect 5

Weapons & Equipment: Deathsuit; MAC knife; FEN 603; GAK 19

Chapter 6: The rules.

Forensics Rules.

When a party of characters arrive at a crimescene and want to use the Forensics skill to determine what happened; apply the following modifiers to the roll.

Modifiers stack. For example; an Operative arrives at a murder scene in Downtown. The victim has been dead for 2 days, and the scene of the murder is near to a busy walkway. Rats have been gnawing on the corpse, which is no longer in very good condition. The GM tells Jai that the Forensics check will be at -7 (-2 for Scene of crime analysis, -1 for poor condition victim, -1 for poor condition crime scene and -3 for the number of people to have passed through the scene).

A successful skill check will result in the character gaining insight into how the victim died, how long ago and if there is any other evidence to be gleaned from the scene. A critical success can yield insightful clues or additional trace evidence that might otherwise have been missed.

| Situation | Modifier | Notes |
|------------------------------------|-----------------|--|
| Scene of crime analysis | -2 | Extracting bullets or performing an autopsy at the crime scene |
| Shiver morgue facilities | +1 | A standard morgue |
| Uptown morgue facilities | +2 | A well-equipped morgue |
| | | |
| Victim in excellent condition | +1 | Body only a few hours old, or well preserved |
| Victim in standard condition | 0 | Body between 12 and 24 hours old, or reasonably preserved |
| Victim in poor condition | -1 | Body between 1 and 3 days old, or poorly preserved |
| Victim in terrible condition | -2 | Body between 4 and 8 days old |
| Victim almost unidentifiable | -3 | Working from heavily decayed remains or bones |
| | | |
| Crime scene in excellent condition | +1 | Crime scene fresh, or well preserved |
| Crime scene in standard condition | 0 | Crime scene a 12 and 24 hours old, or reasonably preserved |
| Crime scene in poor condition | -1 | Crime scene between 1 and 3 days old, or poorly preserved |
| Crime scene in terrible condition | -2 | Crime scene between 4 and 8 days old |
| Crime scene contaminated | -1 | For every extra individual that passed through the crime scene since |

Equipment.

The following equipment is available to any properly trained Operatives.

Shiver Standard Issue Crime Scene and Forensics kit (SICSAF).

Evidence collection kit issued to all forensic Shivers, also offered to any Operatives with Forensics training. Contents include; brushes and bio-powder for printing, bottles and bags of various sizes for evidence gathering, Karma Sniffer unit, Boopa Bio-Spectral goggles, hand-held Bio-Spectral Illuminator, latex gloves, evidence extraction kit (tweezers, forceps, pliers, etc.), 2 bags of Insta-mould compound (for taking impressions), still-shot slug camera w/ flash (type and quality varies from Station to Station).

Cost: XXXX credits, refills of bio-powder for XXXX credits, more latex gloves for XXXX credits

Karma Sniffer unit.

An extension of the research into biologic and electronic interaction begun with the invention of the Finance Chip. With the press of a button, a sample of the air in the immediate area is drawn into the sampling chamber. Lined with altered DAC sensory cells and tissue which are extremely acute to airborne scents, and wired into the unit's processing system, the Sniffer unit is able to detect a wide range of different chemicals and scents. The Sniffer carries a large database on a removable dataslug which contains several thousand known airborne chemicals and scents. Results are displayed on a small screen on the back of the device and the Sniffer runs off a bioelectric battery guaranteed to last 5000 hours.

Cost: XXXX credits

Boopa Bio-Spectral goggles.

A reworking of the plans for UV goggles provided by FEN, the Bio-Spectral goggles utilize Bio-Spectral Illuminators in place of the UV emitters. These illuminators work in conjunction with the specially treated lenses on the goggles to highlight various traces such as skin oils, fingerprints, bodily fluids and blood residue, which would normally be invisible to the naked eye. Due to the size of the emitters built into the goggles, the effective range of the goggles is only 1 metre unless additional emission sources are used.

Cost: XXXX credits

Boopa Bio-Spectral Illuminator flashlight.

A narrow field flash light that uses a Bio-Spectral Illuminator instead of a bulb. Maximum effective coverage is a 0.5 metre square area, with a range of 3 metres. The flashlight has a 500-hour battery which is easily recharged.

Cost: XXXX credits

FEN Bio-Spectral Fingerprint Scanner.

Taking the plans provided by Boopa for the Bio-Spectral Illuminator, FEN modified it to emit a focused beam so it could be used as a scanning device. Either place a subject's finger against the scanning plate, or use the viewscreen to line it up with a fingerprint dusted with bio-powder and hit the button. This cigarette size pack stores the print for download onto Oyster or later transmission back to base via a chippy link to a standard Commset. The scanner is powered by a 500-hour battery.

Cost: XXXX credits

Insta-Mould compound.

Primarily used to take casts of tracks and wound profiles. Insta-Mould comes in sealed bags of various size, separated into two compartments. To prepare, a bag is gripped at both ends and tugged sharply. This causes the internal separator to tear away, mixing the two chemicals. Thirty second of vigorous shaking, then rip off the perforated top and pour. Hardening will take approx. 30-45 second once exposed to air. If more than one bag is needed, the compound is designed to bond to itself, even once already hardened, so just add more to whatever you're casting. CAUTION! Insta-Mould forms an airtight seal and misuse may result in loss of life. Do not consume!

Cost: XXXX credits

Boopa Autopsy kit.

Standard issue kit provided to all Shiver medical staff who will be acting as Coroner/medical examiner, and now available to Operatives so qualified. The kit contains all knives, scalpels, forceps, saws, etc. needed to perform a standard autopsy. Also includes a thermometer, small pen-torch for spot inspection, FEN Fingerprint scanner, and Boopa MedHelm Coroner upgrade module for standard Boopa helms. Coroner upgrade module provides secondary processor for detecting injuries and possible causes of death. Links to COD database to aid analysis.

Cost: XXXX credits

Boopa Blood and Toxin Screen (BaTS).

About the size of an Oyster laptop, the Boopa BaTS is a revolution in chemical analysis. Able to work from a blood sample of only 1ml, the Boopa BaTS can analyse blood for thousand of different chemicals, toxins, micro-organisms, and even viral compounds. Can even link with the Karma DNA Scanner/Sequencer to generate both victim and disease DNA/RNA patterns.

Cost: XXXX credits

Karma DNA Scanner/Sequencer (DNASS).

Karma has been the leader in biogenetics production and development since the beginning of SLA Industries, never faltering and never wavering. Now the same technology that has served Karma so faithfully can be in your hands. Introducing the Karma DNA Scanner/Sequencer; able to scan even the smallest trace of DNA and return a clear pattern to the user. The DNASS is also fully compatible with the Boopa BaTS system, enabling a user to build DNA sequences from blood samples taken with the BaTS.

Cost: XXXX credits

Karma Breakdown Replicator.

What do you do when you believe you have your culprit toxin or drug, but no evidence of it in the victims system? The Karma Breakdown Replicator has the answer. This aquarium-sized device contains all the necessary organic systems, in a modular format, to create an artificial 'victim' so that you can test the breakdown of any compound in the human, Shaktar, or Wraith body; tracing the dissipation of chemicals into the various organs and building a map of the progress of the toxin/drug in question. Due to patent restrictions, Ebon modules are not available at this time.

Cost: XXXX credits

Boopa Portable Ultrasound/MRI scanner.

Normally found in hospitals across the World of Progress, the Boopa Portable Ultrasound/MRI scanner has also found its niche within law enforcement and investigation. With dimensions at 1m x 0.25m x 0.1m, the scanner is designed to be portable for use in the field as a medical diagnostic tool, or as a simple way to peek inside sealed containers. To set up, one only needs to reach underneath the unit and deploy and adjust the legs to the appropriate size. The scanner itself also can be expanded to fit the chests of Shaktars and Stormers, or overly-large packages. Power is supplied by an easily rechargeable 5000 hour battery.

Cost: XXXX credits

Crime-scene tape dispenser.

Standard issue for Forensics teams, Shivers, and Monarch units. Contains 50m of self-adhesive, reflective, plastic tape. The tape is bright yellow and reads 'Crime Scene: Do Not Cross' in big black letters and the dispenser easily snaps onto belts or suits of armour.

Cost: XXXX credits

Blood-B-Gone.

Blood-B-Gone is a black-market substance usually used by gangs and killers who wish to erase their crimes. It is a blend of corrosive enzymes and bleaches that erases the biological signature of blood and other bodily fluids when applied to the area. It removes both the visual and chemical clues that might normally tell a forensics officer that blood has been spilled in an area. It won't destroy large quantities of tissue, such as whole organs or bodies, but if enough Blood-B-Gone is poured on recently-living tissue it will corrupt the DNA signature and make DNA identification extremely difficult.

Blood-B-Gone is sold in large plastic flasks, usually in 2- and 5-litre measures. A litre of Blood-B-Gone will destroy a litre of blood, so a 2-litre bottle will clear up a small spill (as you would get from a stabbing or gunshot) and a 5-litre bottle would clear up a major exsanguination such as the full dismemberment of a human (the human body contains, on average, 5 litres of blood). Possession of Blood-B-Gone is a criminal offence and often seen as conspiracy to murder.

Cost: XXXX units (2-litre bottle), XXXX units (5-litre bottle)

Polygonal rifling (illegal gun modification).

Polygonal rifling replaces the rifling in a firearm's barrel so that it leaves very generic ballistic fingerprints, making any bullets fired from the gun very hard to trace back to it.

Polygonal rifling is an illegal modification in the World of Progress, any weapon found to have been modified in such a manner will be confiscated and the owner questioned.

Cost: XXXX units (pistol), XXXX units (rifle)

SHIVER Morgue Transport APC (The Meat Wagon):

The SHIVER Morgue Transport, or the Meat Wagon as it is referred to by most of the SHIVERS on the streets, is a modified Hammer APC. Originally based off the FEN Battletaxi design, the new model provide increased mobility and versatility when responding to either Street, Sleeper, or Dispersal requests. Normally able to transport 10 personnel plus gunner and driver, the transport space has been reduced considerably, leaving the driver and gunner positions, plus seating for two more. The remaining 8 slots have been sealed off from the front of the APC and a high efficiency refrigeration system installed. An adjustable gurney rack system takes gurneys loaded into through the rear hatch of the APC, and loads them into special bays on the sides of the unit using a lift system. Once the left and right sides of the unit have been filled, the centre can still be stacked full, allowing the cooler to store up to 9 human-sized corpses, 6 Shaktar/Malice stormer sized, and even up to two Chagrins stormers or a Low-wave. Should a victim turn out to not be completely dead, a series of sensors attached to the gurney racks monitors movement/vibration that deviates from a specific range, as well as temperature variations.

FEN Mobile Forensics Lab and Autopsy Theatre (MFLAT Trailer):

Utilizing a standard all terrain trailer setup for ease of transport, the FEN MFLAT contains everything needed for the processing of Forensic and DNA evidence as well as the performing of Autopsy's on victims. Normally only employed during massive disasters, mass murders, genocides, terrorist actions, large scale riot control actions, etc. the FEN MFLAT is nevertheless a wonder to behold. Once reaching a scene, the trailer is dropped and then expanded to double its width from 2.6 to 5.2 meters. This provides plenty of well-lit room for coroners and forensics technicians to work with little crowding or inconvenience. The trailer is entered through the back, with benches, desks, and various equipment stations lining the walls. The front third of the trailer is taken up by an autopsy theatre that is walled off from the rest of the trailer by a thick layer of clear plasteel. This area incorporates several atmosphere seals that can be activated in case of bio-hazardous contamination to seal off the room from the outside, preventing the spread of toxins/disease. An airlock and decontamination system can also be set up within minutes to facilitate the use of bio-hazard suits during autopsy.

The entire trailer is supported by a portable fusion generator, water treatment/distillation system, and a filtered air system for when services are not available or are contaminated. The air system also includes an air recycler and enough O2 supply to last 12 hours alone, or 3 days using the air recycler without replenishment. Wireless local band, Fiber-optic hookup, and satellite link-up are available for communications and data access. Externally, the MFLAT's grey appearance incorporates

standard Hammer APC plating for protection, standard flood torches, and spot torches for illumination. External hookups for tapping into the trailer's power/water/data for outside use are also available.

Karma "Sleuth" cell scanner

This device allows a user to extract the otherwise biosecured DNA from Karma equipment and from Stormer tissue. It also allows a skilled user to record the 'cell tag' information -the microscopic data etched onto all Karma and Stormer cells. The cell tags can be cross-referenced with Karma records to identify what, or who, the cell came from.

Cost: XXXX credits

OpticS 3D imager

The OpticS 3D imager is a dome-shaped device used to record situational data from crime scenes. When placed and activated, the device uses powerful laser and ultrasonic detectors to make a detailed three-dimensional map of a crimesscene, which can be annotated and manipulated by forensic officers as needed. The images created by the imager can be viewed on a standard Oyster computer.

Cost: XXXX credit

Notes on running forensics games.

Games Mastering Tips.

Running a game centred around forensic investigations, as opposed to combat or interaction focused games, can be a tricky business to do well.

The following are some tips that, hopefully, Games Masters will find useful.

Don't get bogged down.

One of the biggest problems a forensics game can face is that it can be easy to become bogged down in the details of the case. Players can become bored if all they have to do in a game is make Forensics roll after Forensics roll.

In the end, as a GM, you must be able to gauge your players and how they will react in an investigation game. Know how much they can take before they get bored.

Ideally you should carefully plan out the details of the focus of the game; the murder (or whatever crime the forensics rolls with revolve around). Work out how the crime occurred, what evidence is available and how the players will be able to use it to prove who the perpetrator was.

This is where you should exercise caution.

Work out who the killer is, how he committed the crime and what clues he left behind, but DON'T worry about what underwear he had on or whether he had eaten beef that day (unless of course, such information is blindingly vital to the game). Think in *just enough* detail that you can give your players enough information on the case to keep them interested and guessing at the killer's identity, but not so much as to overwhelm and bore them.

Red herring clues

You don't want your players to have too easy a time of things. Crimes are rarely simple to solve, and dropping a few red herring clues into the mix can spice things up a bit.

BUT don't add too many. Remember the boy who cried wolf? If you add too many red herrings, or you make a habit of always having them in your games, then soon your players will come to expect them.

Another risk of red herring clues is some times the players will inexplicably latch onto one and think it is the real deal; pursuing it at the exclusion of all other evidence. When this happens your carefully crafted plot can go off the rails and the players will become frustrated if they realise they spent ages going in the wrong direction.

Of course, such a detour can be amusing from time to time, and can serve to remind players that they are not all-knowing.

Prepare to improvise

Players ask the damndest things. Often you will think you've written a foolproof plot and then your players will go in completely the opposite direction to you expected them to.

Either that or they will ask you a question you really didn't expect and hadn't prepared for.

In both cases, be prepared to think on your feet to create an answer.

Don't let your players see your indecision; they must have total confidence that you have expected and planned for everything they do or say. If you are struggling for an answer, pretend to consult your notes while you think of a response.

How long will it take?

Below is a table of common time scales for the various tests a character can perform. Such information is useful to determine how long a character is spending on the case (in the case of working out pay). They can also be used as a goad to deter players who might be focusing too much on running tests.

DNA analysis (4 hours)

Analysing a DNA sample to determine race, gender and other details. Also comparing two DNA samples to determine relation (if they are from the same person, or from related family members). Such tests can take longer if the DNA is damaged or corrupted.

Ballistic comparison (2 hours)

Comparing a bullet with other bullets or a firearm to determine if they are linked. Also analysing bullets to determine type, date of manufacture and details of the weapon fired from.

Facial reconstruction (6 hours)

Rebuilding a victim's face from a bare skull using both digital and manual techniques.

Entomological breakdown (8 hours)

Analysing the insects found on a body and then creating a reverse timeline to determine how long ago the person died, and other specifics of their death that can be learned from insects.

Material analysis (3 hours)

Analysing materials (organics, mineral, artificial) to determine type, origin and use.

Photographic reconstruction (5 hours)

Reconstructing either damaged or incomplete photographic or video evidence to create a whole film or image.