

WISDOM FROM THE WASTELANDS

Issue #30:
Nanotechnology II



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Unlike the first installment in our series on Nanotechnology, issue #28, which dealt mostly with rules and mechanics, this article dives right into the goodies. Here is a host of tiny tools and toys you can use to spice your *Mutant Future* games.

Ageless

Strength: +5; Incubation: 1d3+1 weeks

Whether deserved or not, the Ancients had a reputation for being vain and fearing death. The richest and most powerful ancestors lived incredibly long lives by using drugs, various medical procedures, and, of course, nanotechnology. For those very lucky few, those with the means to match their desires, the rare and amazingly expensive Ageless therapy was Ponce de Leon's dream fulfilled — these robotic nanites reverse aging.

A treatment begins by introducing nanites into the patient's body. During the following several weeks the nanites incubate, integrating with and working on the various systems. Once complete, the physical effects of senescence — wrinkles, age spots, grey hair, and the lot — will all have vanished. The host is typically rejuvenated to appear in her mid-twenties. And, so long as the nanites remain in her body, she will stay this way without growing any older.

Unfortunately, there are some caveats. If the nanites are destroyed or purged from her body, the host begins to age normally again, with no side effects. Also, the nanites do not reverse age-related mental and fertility issues, only the physical signs. Lastly, should the host suffer something like a Gen-Scram attack, the Ageless treatment cannot help. It will only provide a pretty corpse for the funeral.



Assemblers

Strength: +3; Incubation: See description

With access to enough raw material, Assemblers can build items even in the middle of a desert. If discovered while inert, these robotic nanites look like very fine grey powder stored in a metal container the size of a salt shaker. They need to be activated by a special palm-sized computer, but Assemblers and computers are not always found together.

Each computer is different and will usually hold several preprogrammed blueprints. To determine the quantity, first roll on the Assembler Model Table. For example, rolling a 3 is a Civilian Mid-range computer, which holds 2d3 individual blueprints — say, 4 total.

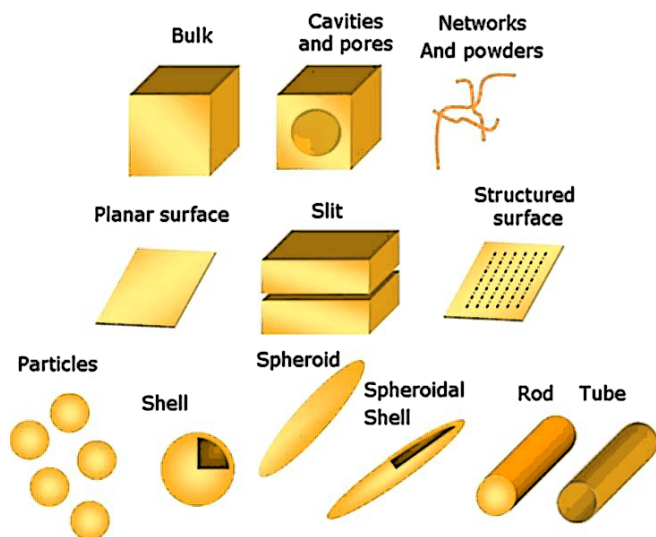
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Assembler Model Table

Roll	Model	Number of Blueprints
1-2	Civilian Low-end	1d3
3-4	Civilian Mid-range	2d3
5-6	Civilian High-end	2d6
7-8	Commercial	3d8
9-10	Industrial	4d10

This publication is dedicated to providing useful information, game content, and ideas to players of modern, science fiction, and post-apocalyptic table-top and role-playing games in general and to fans of Goblinoid Games' *Mutant Future* RPG in particular. The material contained herein are compatible with it and any others that use the "Basic" system introduced in the most popular role-playing games of the early 1970s and are easily adaptable to many other games (especially successor systems, to include those covered by the Open Game License).



The various model types also indicate what kinds of blueprints are available. This is found by consulting the Blueprint Table and rolling 1d10 for each. Continuing the example above, our four rolls come up with 2, 5, 7, and 9. This means the computer holds plans for a Primitive Firearm, an Advanced Melee Weapon, and two Gizmos.

Finally, to determine the specific items, roll on the appropriate Artifact Tables in the *Mutant Future* core rulebook (the Technological Artifacts section). In our example, this computer holds plans for: a Carbine, a pair of Shock Gloves, a Rad Tab, and a Flashlight.

Note that Advanced Firearms include pistols and rifles, while Explosives include grenades, bombs, and missiles. Gizmos also include power sources, but these will be created

unpowered. Also, looking back through the tables, you might notice just how many plans an Industrial Assembler computer might hold; it will indeed mean lots of rolling on the treasure charts.

When the user chooses to build something, the computer wirelessly instructs the nanites gather raw materials, reproduce, and assemble the item. The time this takes depends on two things: the item's complexity and the resource availability. The latter is determined by the terrain where the assemblers are used.

The table below is a rough guideline the Mutant Lord can modify to suit her own game. For example, the ML may decide a particular area has been all but stripped of useful material, greatly increasing the time it takes the nanites to create an item. Or, despite the nanites being used in a desert, the area could be metal-rich, reducing the assembly time.

Ruins are typically resource-rich places, like installations and underground buildings, or even junkyards and garbage dumps. **Communities** are everything from a small cluster of hovels to full-sized cities. **Mountains/Hills** include badlands, ridges, and foothills. **Open terrain** might be plains, grasslands, low rolling hills, scrubland, or anything similar. **Desert** and **Arctic** areas are mostly lifeless expanses with few resources.

Once the nanites finish their task, they incorporate themselves into the item they assembled. The computer can be reused, but it requires a new swarm of nanites to create each item.

Blueprint Table

Blueprint	Civilian Low-End	Civilian Mid-Range	Civilian High-End	Commercial	Industrial/Military
Primitive					
Firearms	1-2	1-2	1-2	1	1
Primitive					
Melee Weapons	3-4	3-4	3-4	2	2
Advanced					
Melee Weapons	N/A	5	5	3	3-4
Advanced					
Firearms	N/A	6	6	4	5-6
Advanced					
Armor	N/A	N/A	7	5	7
Explosives	N/A	N/A	N/A	6	8
Gizmos	5-10	7-10	8-10	7-10	9-10

Assembly Time Table

Terrain	Complexity 1	Complexity 2	Complexity 3
Ruins	5d6 minutes	1d2 hours	2d6 hours
Communities	10d6 minutes	1d4 hours	4d6 hours
Mountains/Hills	1 hour	2d4 hours	1d2 days
Open Terrain	1d2 hours	2d8 hours	1d4 days
Water	1d4 hours	3d6 hours	2d4 days
Desert/Arctic	2d3 hours	3d8 hours	2d6 days



Better-U Nanites

Strength: +1; Incubation: Instant

In some beauty-obsessed Ancient cultures, people changed their looks by surgically sculpting their bodies and remapping their genomes (see *WfiW* issue #4 for more details). Even nanotechnology was adapted to help improve upon the natural appearance.

Better-U was one version. It is dispensed from a tube as a thick gel, which is applied to the entire body. The nanites immediately begin to work, seeking out blemishes, scars, and unsightly growths (such as warts and skin tags). Once these have all been located and mapped, the nanites will permanently (and painlessly) remove the disfiguring marks, and enhance the user's healthy 'glow'. This gives the user a +4 to Charisma, and a -2 bonus to reaction rolls (where applicable). If the ML decides, the nanites could also target tattoos, but, unfortunately, they will not cure diseases or remove defect mutations.

When the task is complete, the nanites shut down and slough off the host's body, providing no further benefit. A user can only benefit from this treatment once, unless she gains new scars or blemishes. If that happens, Better-U can be re-applied and the nanites will remove the imperfection, but the host will not gain an additional bonus to her Charisma score or reaction modifier.

Defenders

Strength: +5; Incubation: Instant

These robotic nanites were designed to help a host's natural immune system fight off invading nanites. To help them survive an EMP, Defenders are always "hardened" (see *WfiW* issue #28, Nanotechnology 1 for more information). They usually come with a programmer/controller computer that is also used to scan the user for other nanites.

When introduced into a host, Defenders will immediately move through her body seeking out and destroying other swarms present. To prevent them from purging resident beneficial nanites, Defenders must be programmed — before being injected — to ignore these swarms. They are effective against Converters (see the upcoming *WfiW* issue, Nanotechnology 3 for more information), and will allow the body to heal any damage inflicted by those nanites, with the exception of a full-on phase IV conversion.

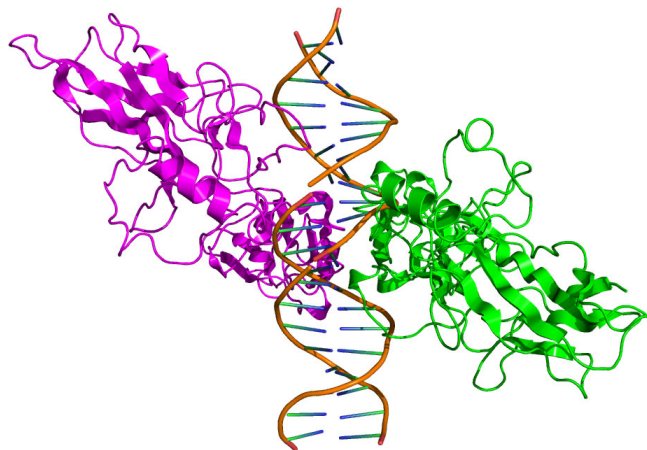
Defenders stay permanently within a host, dormant unless a hostile swarm invades her body. Then they immediately reactivate and attack the intruders. When this happens, the host is allowed a saving throw versus death. Should this fail, the Defenders eradicate the invaders, but are also destroyed themselves. However, if the save succeeds, enough Defenders survive to reestablish the swarm 4d6 hours after purging the invaders.

Gen-Scram

Strength: 1d3; Incubation: 1d3+2 days

Terror weapon payloads created to decimate cities and destroy enemy morale, Gen-Scrams are a perversion of the Genetic Damage Restorer technology (see *WfiW* issue #13 for more details). Rather than guarding against and repairing genetic damage, these robotic nanites are pre-programmed to induce specific fatal or disabling genetic defects (determined by the ML).

When attacked by Gen-Scrams, a target must save versus poison, with a penalty based on the nanite swarm's Strength. With a successful save, the nanites are purged from the target's body without causing any harm. However, if she fails her save, the victim's genome is damaged and she develops a drawback mutation — even if she is a pure human. Her offspring will have the same mutation, and develop an



additional 1d3 other drawbacks.

If the victim misses her saving throw by 7 or more she mutates instantly. But, instead of developing drawbacks, she is stricken by a fatal runaway cancer. This inflicts 3d6 points of damage per round for 4d8 rounds unless the nanites are destroyed with Defender nanites, an EMP, a powerful electrical current, or using a Genetic Damage Restorer. Purge, Auto-Resins or Regenerators could be effective against Gen-Scrams, if administered immediately after exposure.

Gen-Scrams have a variable potency because some were military grade while others could have been created by terrorists using whatever materials they could steal. The nanites can be delivered by any type of weapon able to hold a toxin/poison payload: missiles, bombs, some large caliber ammunition, etc. For more information, see 'Nanite Ammunition' at the end of this article.

Heal Augs

Strength: +1; Incubation: 3d6 hours

Ancient scientists developed these organic nanites to permanently augment a patient's ability to heal herself, fight infections, and resist toxic exposure. After introduction, Heal Augs spread through the host's body, altering, manipulating, and joining with bone marrow, various organs, and the lymphatic system. This process triples the host's healing rate (see *WftW* issue #8 for more details), and gives her +2 bonus to save against poisons, toxins, or disease. Heal Augs work well with Hyper Antibodies, and their bonuses stack.



Hyper Antibodies

Strength: +1; Incubation: 3d6 hours

Hyper Antibodies are immune system boosters that come in both robotic and organic versions. Unless they are destroyed or purged from the host, the nanites provide a +4 bonus to any save versus disease. As noted above, Hyper Antibodies work well in conjunction with Heal Augs, and their bonuses stack.

Rad Scourers

Strength: +5; Incubation: 1d3 days

Rare and complex nanites, Rad Scourers can repair damage caused by radiation. A character will still be hurt by ambient radiation and radiation-based attacks, but gains a +5 to her saving throws to resist the damage. Note that, no matter how low the result needed, rolling a 1 will always fail. The host is also able to heal radiation damage more rapidly, recovering her daily healing rate (based on Constitution, see *WftW* issue #8 for more details) every hour instead of every 24 hours.

Once they have been introduced into the host's body, the nanites map and store her genetic structure in their collective memory and in the programmer computer. As a result, the nanites can always repair any genetic damage the host sustains. This effectively renders her immune to radiation's mutational effects. Because Rad Scourers only work on damage caused by initial exposure, they do not make mutant humans into pure humans, nor do they affect parasite mutations, embryos, or symbionts.

Regenerators

Strength: +4; Incubation: 1d4+3 days

A battlefield treatment common during the final wars, these robotic nanites could repair all but the most severe wounds. This therapy effectively gives a patient the *regeneration* mutation — but damage is repaired once per round, instead of once every twenty four hours. Even lost limbs can be regrown in 1d4+3 days. Regenerators can also help a patient ignore pain. She is aware of the injury, but will not suffer the debilitating effects of pain and injury (see *WftW* issue #11 for more details).

As long as she is not below -10 hit points, Regenerators can stabilize the patient (see *WftW* issue #8 for information on negative hit points). On the round following injection, the character will be healed to zero hit points, and if knocked out, she will regain consciousness and be able to act.

Unfortunately, any character wounded below -10 hit points cannot be brought back to life. Should the patient die, it is up to the ML to decide how long the nanites remain active or in the host. Regenerators are not programmed to recognize brain death, so they will repair the body, leaving a woundless corpse.

Although stock Regenerators cannot resurrect the dead, humanity's ability to corrupt as well as create must be considered. It is possible that an altered strain, some *Frankenstein*-inspired terror weapon, exists out in the world.

Self-Medis

Strength: +3; Incubation: 36+4d6 hours

The inventors of Self-Medis must have been inspired by the advice, “Doctor, heal thyself,” for that is just what these robotic nanites help the host do. Using molecules gleaned from within her, the nanites create medication while inside the patient’s body.

After being released into a host, the nanites incubate for about two days, spreading out and building up their numbers. When ready, the nanites search the body for molecular building blocks, gathering enough in 12 to 24 hours to synthesize the specified drug. Healing medications are the most common selection, but any medical drug can be created. The user must make her choice when the nanites are first injected, and they will hold 1d3 doses inside her when finished. Once the drugs are used, the nanites are purged from the body.

While the nanites mine for the proper materials, the host must consume four times the normal amount of food. The ML may determine she also has strange cravings, eating things she would normally shun, like plastic bottles, certain plants, or even nontoxic chemicals.

Self-Medis are typically found stored in a hypodermic (or similar device) linked to a small handheld computer. The computer relays instructions to the nanites on which drugs to create and the conditions which trigger their release. For example, a user can program the nanites to synthesize Stimshot A, and to release the drug once she has suffered a certain level of trauma (like losing 25% of her total hit points).

Sterilizers

Strength: 1d4; Incubation: 1d3 weeks

The origin of these organic nanites has Wasteland scholars puzzled. Sterilizers were clearly intended to be terror weapons, but they might have been created to deal with the numbers of Uplifted that appeared just before the final wars (see *WftW* issue #6 for more details). Given the nanites’ variable virulence, it is entirely possible that different groups, with different agendas and technical capabilities, each synthesized their own versions.

The nanites are typically transmitted through sexual contact, although they can be made into payloads delivered by bombs and ammunition. When a target comes into contact with Sterilizers, she must save versus poison, with a penalty equal to the nanites’ Strength. If she fails, the victim is rendered permanently sterile.

Several considerations are left to the individual ML. Should the situation arise, she must decide if Sterilizers can affect plants, and mutant animals that do not go through sexual reproduction. There is also the question of whether the nanites are species specific, or indiscriminate — i.e., could they cross from pure humans to mutant humans, for example.

Tough-U Nanites

Strength: +4; Incubation: 1d4+1 weeks

Commonly used by the military, extreme sports enthusiasts,

and those working in hazardous environments, these popular nanites can be found in both robotic and organic forms. Their wide appeal came from the nanites’ ability to weave, in just a few weeks, a layer of super dense muscle just beneath the user’s epidermis. This provides a +2 Strength bonus and improves the host’s natural Armor Class by -2. Tough-U nanites also give the user a +4 bonus to save versus harmful nanites, such as Destroyers. Although the nanites shut down and are purged from the body after completing their assigned task, the user permanently gains all the aforementioned bonuses.

Traumatize

Strength: +2; Incubation: 1d4-1 hours (minimum 1 hour)

Traumatize was a preventative therapy typically employed by those likely to be severely injured: the military, police and security services, and civilians with dangerous jobs or hobbies. It comes in both organic and robotic versions, and the latter will even work on androids, robotic units, and replicants.

After being introduced into a host, a Traumatize pre-treatment takes about an hour, as the nanites multiply and insinuate themselves through the body, where they remain until destroyed or somehow purged. Should the host’s hit point total ever fall to zero or below, Traumatize automatically stabilizes her, keeping her conscious and preventing further hit point loss. However, the host will still die if her hit point total falls to -10 hit points (or her Constitution score, if using the optional rules from *WftW* issue #8).

NEW EQUIPMENT

Nanite Ammunition

Many weapons that discharge physical projectiles can fire ammunition with nanite payloads. This includes primitive firearms, micro- and mini-missile launchers, sliver casters (see *WftW* issue #3), bead weapons, and grenade launchers (see *WftW* issue #9). Destroyers are the most frequently used nanites, but others can be used.



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