

Fellows - FYI - pt ed  
materials.

# SLEEP HYGIENE

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## *I have difficulty sleeping at night, and I don't feel well during the day.*

Difficulty sleeping at night can give rise to problems during the day. The problems at night can take the form of difficulty falling asleep or difficulty staying asleep. The medical terminology for these two problems is "difficulty initiating sleep" and "difficulty maintaining sleep." No matter what the problem, it can give rise to a poor night's sleep. The lay term for this is insomnia.

A poor night's sleep often gives rise to problems the next day in the form of excessive sleepiness. An individual wakes up with a headache, feeling "groggy" and "sluggish," and has a difficult time progressing through the day. Memory sometimes is poor, performance is marginal, and the person becomes irritable and difficult to get along with. If a poor night's sleep occurs night after night, the problem can become serious with personality disorders developing, marital problems occurring, and daytime sleepiness of such a severity that a person may fall asleep driving a car.

All of these problems are broadly grouped under the category of sleep disorders. There are many factors which cause sleep disorders, but central to the treatment of any problem sleeping is sleep hygiene.

## *What is sleep hygiene?*

Sleep hygiene is the activity of doing certain things each time a person sleeps in order to achieve a good night's sleep. Although most of these are common sense, some of them are not. For example, although most of us are able to drink coffee, tea, or coca-cola when we are younger and have no difficulty sleeping at night, as we grow older some of us become highly susceptible to a single cup of coffee at 10:00 a.m. which results in a poor night's sleep that same night.

The importance of sleep hygiene cannot be over emphasized. Each of the points listed below are important. Although you may not believe that the points are important, you must decide for your own lifestyle how important your problem with sleep is. If the problem with your sleep is not too important, then you may not want to alter your lifestyle. On the other hand, if your problem with sleep is disrupting your lifestyle, then I would encourage you to change each of the points listed to coincide with what is considered good sleep hygiene. Each of the points have been verified in the medical and sleep literature to be important in producing a good night's sleep. It should be pointed out, however, that in most cases an individual is completely unaware of poor sleep hygiene producing a poor night's sleep.



### **Why is sleep hygiene important?**

The Association of Sleep Disorders Centers is the United States' primary source of information and educational programs on sleep. It and similar organizations have collected data on what influences sleep at night. This large body of medical information includes points on specific medical disorders, foods, patterns of sleep, and similar factors. If one has a sleep problem and goes to see a sleep specialist, the first thing always recommended is to improve sleep hygiene. Therefore, if you have any problem with sleeping or difficulty with sleepiness during the day, you must practice good sleep hygiene.

### **What if I don't want to change my lifestyle?**

The decision is completely up to you. The points of sleep hygiene are listed, because they are known to alter sleep. If you have a major problem, you will need to make a major change. If you have a trivial problem, you may wish to not change. For example, that single cup of coffee at 10:00 a.m. may not be important to people with a trivial sleep problem, and they may wish to continue drinking it. On the other hand, people who have a serious sleep problem may wish to completely give up all coffee and caffeine permanently!!!

### **What are the specifics of sleep hygiene?**

Sleep hygiene is divided into several distinct categories. Each category has specific recommendations and points that can be important to you in obtaining a good night's sleep.

### **Specific Recommendations on Sleep Hygiene**

Each category listed below identifies a particular potential problem in your sleep. Please read over each section, and those that apply to you should be read a second time. If you are currently doing all of the recommendations, you may go on to the next section. On the other hand, if something within that section reveals that your sleep hygiene is poor in that area, you must correct it. Again, you make the decision as to whether you wish to change your lifestyle dependent upon how bad you think your sleep problem is. Also, please understand that at times only a spouse knows the true extent of a sleep problem. Just because you think there is no problem with your sleep at night or with daytime sleepiness, your spouse may know otherwise. Thus, if your spouse thinks that there is a problem either with your sleep in general or within a specific section below, read the section even more carefully.

## SLEEP TIME

Of all the factors in sleep hygiene, the time you get into bed and get out of bed is the most important. All of us become jet lagged when we travel to the East or West Coast. Traveling to the West Coast from Hawaii is only a two or three hour time difference, but the majority of us would be jet lagged if we flew from Honolulu to Los Angeles and immediately "went onto" California time. However, this is exactly what we do if we "sleep in" two to three extra hours in the morning or "stay up" two to three hours later at night.

This problem is particularly devastating for those working rotating shifts. Although many people must work shifts, some can do it more easily than others. Some people simply cannot do rotating shifts at all unless they pay the penalty of excessive sleepiness during the day. If you must engage in shift work, it is absolutely crucial that you get into bed at the same time, or you will be double jet lagged...jet lagged from the shift change every, let us say, month and jet lagged again from sleeping in or getting up early. In addition, if you must do shift work, it is easier on your internal body clock to rotate shifts "forward." In other words, go from days, to evenings, to nights, not the reverse such as days, to nights, to evenings. The body simply does not work well when rotating in reverse. In addition, your body requires about one day for each hour of shift change to fully adjust.

The most important time is the time you get out of bed. You should religiously get up the same time each morning. If you are extremely tired, get up anyway and do not sleep in. Allot for yourself a set number of hours to be in bed each night, usually about seven to eight hours for an adult. Get into bed at night such that you will have seven to eight hours in bed by the time you get out of bed at your set time. Do not deviate from this for any reason at all. If for some reason you must stay up very late at night, you must still get out of bed at your set time in the morning. Try not to go to bed too early or you may wake up too early in the morning.

The time in bed is not the same as time asleep. You must strive to make your time in bed the same as your time asleep. In other words, because the average adult needs about seven to eight hours of sleep, you should spend roughly seven to eight hours in bed. If you go to bed and cannot fall asleep in ten minutes, get up and get out of bed. Do something else and go back to bed only when you are tired. Again, if you cannot sleep, get up. Only use bed for sleeping. If the time comes around in the morning when it is your normal time for arising, you must not go back to bed, but instead get up. Never use your bed for watching TV, reading, as an office, or any other purpose. Do not take naps during the day. Sleep only at night.

## SLEEP ROOM

Quiet: Your room must be absolutely quiet. Being awakened at night is the same thing as being jet lagged. Once you go to sleep nothing should awaken you. You must insure that noisy neighbors are quieted, televisions cannot be heard, and screeching cars are in the distance.

People with young children in their household can have problems. Young children can awaken many times during the night. Although parents will gladly awaken to take care of crying children, the awakenings will disrupt sleep and produce sleepiness during the day.

You must have a quiet night's sleep for at least seven to eight hours. If you are lucky enough to be able to sleep in a noisy environment, great. However, if you are sleepy and tired during the day and are being awakened at night, it is the awakenings at night that are causing a major part of your problem.

Ear plugs are extremely effective!!! Try them. There are several different varieties made which are rated in terms of the amount of sound eliminated. Shop around and find those that seem to work the best for you. The foam type seems to work the best, but they tend to wear out after fourteen to thirty days of nightly use. I like those made by "The E.A.R. Group."

Sometimes it is simply not possible to have a quiet sleeping environment. Outside noises constantly will be heard such as a barking dog, television, or the neighbors. In such cases sometimes a trick can be done to give the room a background noise that will "mask" the outside noise. There are several "noise machines" made commercially. The Sharper Image at Ala Moana sells such a unit. You can adjust this unit to give a background noise of any intensity, and the machine will make the noise of rain, surf, or wind. It is very effective for masking background noise. Sometimes an air-conditioner will do the same thing. Some people may even find that background music will do a similar thing.

Cool: The room must be cool and conducive to sleep. If it is hot, stuffy, and uncomfortable, you will not sleep well. On the other hand, if it is too cold, you also will not sleep well. Keeping your windows open for a cool breeze can be helpful as long as it does not let in noise.

An air-conditioner can sometimes be extremely effective. The effectiveness of an air-conditioner allows you to shut all the windows to keep out noise, cool the room to a proper sleeping temperature, and the background hum of the air-conditioner masks outside noise and allows you to sleep. Sometimes, however, the dryness of an air-conditioned room is bothersome.

Dark: Your room must be pitch black. Light that reaches you, especially bright lights, will not allow you to sleep well. Light is now known by sleep specialists as being a "trigger" to alter sleep and also influence jet lag. In other words, if you go to a foreign country and want to quickly get used to their time, expose yourself to bright sunlight as much as possible. It will "wake up" your internal time clock. Similarly, if light shines on you while you are sleeping, your internal time clock may make it difficult for you to fall into a deep sleep.

Block off all windows and doors with curtains that have a special darkening material on the inside. Do not allow street lamps to shine into your sleeping area.

No interruptions: This is similar to the importance of a quiet room, but it is somewhat different. Sometimes people think that it is okay to be interrupted at night, because it is "necessary" as long as other things do not interrupt them such as a barking dog. This is incorrect. Physicians are the worst. Repetitive phone calls at night, which disrupt a physician's ability to sleep, result in poor performance the next day. This is why governments across the United States have limited the number of hours that hospital interns and residents may work in a week to insure that their performance is at a peak.

This means that you should not have phone calls at night, you should not be awakened by dogs, children, the television, or anything else. It is true that this may mean a major change in your lifestyle, but it is, of course, your decision as to whether it is worth it.

## DRUGS

Caffeine: Coffee and tea are the most common sources of caffeine, but caffeine is used in numerous other foods and medications. You should be extremely careful that you are not accidentally taking caffeine and do not realize it. Caffeine is found in Anacin, Alka Seltzer, Mountain Dew soda, Dr. Pepper soda, "No Doze" pills, and many other preparations. Check them carefully, or you may be innocently taking caffeine.

Caffeine is a potent drug that will alert an individual. The effects of caffeine in some people can last for up to 12 to 18 hours. In other words, coffee in the morning, even a single cup, can give problems with sleeping at night!! Most of us are not that sensitive, but if all else fails, you may wish to eliminate that single cup of coffee in the morning.

It is possible to become addicted to caffeine. If you are a regular coffee or tea drinker, it is likely that your sleep at night is in some way affected by this caffeine. However, if you simply try to stop the caffeine, you may develop withdrawal, be irritable, and develop a headache. You will need to gradually reduce the amount of your caffeine intake over a period of time to reduce the withdrawal effects.

**Tobacco:** Tobacco products of all kinds contain nicotine, another potent drug known to alter sleep. Cigarette smoking, particularly in the afternoons and just before sleep will disrupt sleep. Many cigarette smokers will state otherwise. They say that cigarette smoking relaxes them, and then they are able to go to sleep. This is incorrect. What such smokers are saying is that they are addicted to the nicotine in cigarette smoke and have to get their "fix" before they go to sleep. Unquestionably, however, the nicotine does disrupt sleep.

**Alcohol:** Alcohol is another potent drug that alters sleep. In general, it takes the body one hour plus one hour for every alcoholic beverage consumed to be metabolized in the body. In other words, if you drink a single beer, it takes the body  $1 + 1 = 2$  hours for the effects of that single beer to be completely gone from your body. Thus, if you go to sleep at 10:00 p.m., you would need to finish the beer by 8:00 p.m. Two drinks would be  $1 + 2 = 3$  hours; finish that beer by 7:00 p.m., and so on.

If any alcohol is in your blood when you finally go to sleep, it will disrupt your sleep. It is best to not drink alcoholic beverages within six hours of sleep.

Similar to smokers, individuals who enjoy alcohol will state the opposite. They will make the statement that alcohol helps them go to sleep. This is partially true. One or more drinks at bedtime can help an individual fall asleep, but it produces disruptions in their sleep once the person falls asleep. The quality of sleep is reduced, and an individual sleeps poorly and does not wake up as refreshed. This is one of the mechanisms of the so called "hangover." Unfortunately, most individuals are not even aware that this is happening. Consequently, alcohol of any kind can be detrimental.

A good example of the deleterious effects of alcohol are seen in alcoholics. If we define an alcoholic as one who drinks two or more alcoholic beverages every day, once such an individual completely stops all alcohol intake, it can take the body one year for all of the effects on sleep to disappear. Thus, alcohol has an acute effect on sleep as well as a chronic effect. If you rarely drink alcohol but have a single drink, it may affect your sleep that night. If you chronically drink alcoholic beverages, it may take many months before the effects of the alcohol are completely reversed.

**Sleeping pills:** Sleeping pills are extremely disruptive to sleep. It is a general rule in sleep medicine that for every night you take a sleeping pill you must "pay it back later." For example, if you take a sleeping pill tonight, you may have a good sleep. However, the next night you probably will sleep poorly. It is for this reason that sleeping pills should only be taken for a short term.

Short term is defined as no more than five to seven days. Imagine someone who has been using sleeping pills nightly for months or even years!! It may be almost impossible for an individual to stop using sleeping pills, because the pay back period may be so long that it simply is not worth it.

Sleeping pills can be helpful to an individual who has a short term problem with sleep caused, for example, by a death in the family. However, if sleeping pills are used for more than a week, the effects tend to reverse. Sleep quality at night deteriorates, one becomes "addicted" to the medication, and it loses its effectiveness.

One of the most common problems which produces poor sleep in the elderly population is the chronic use of sleeping medications, tranquilizers, and sedatives.

If a person has a problem with sleep, the most dangerous thing is to say, "I only need a sleeping pill." It is mandatory to first have the reason for your difficulty sleeping identified and treated. In almost all cases your sleep will improve without a sleeping pill. It would be bad medicine for you to be suffering from a treatable medical illness that is the cause of your sleeplessness and not have that medical illness diagnosed and treated. Consequently, anyone with a sleeping problem should first have a thorough sleep evaluation.

Other drugs: Many other drugs will produce problems with sleep. One of the most common is a medication used to treat lung disease. Theophylline compounds such as Theo-Dur, Slo-Bid, and Albuterol "hype" the body. Some susceptible individuals simply cannot use these medications as they will stay awake all night. On the other hand, some individuals have no problems at all. There are many other medications that produce problems with sleep, and thus it would be important for you to specifically ask whether any of the medications you are taking can alter your sleep. If you develop a problem with your sleep within a week or two after using a new medication, there is a good likelihood that the medicine may be doing it. Ask questions!!!

## EMOTIONAL PROBLEMS

Depression: Depression is a major cause of difficulty sleeping at night and secondary sleepiness during the daytime. Although most of us know something is wrong and can sense we are depressed, sometimes it is only a spouse or an experienced professional who can help. The death of a family member, a major accident, a business failure, and many other factors may produce depression that simply needs professional help. Depression oftentimes manifests itself by early morning awakenings with consequent sleepiness during the day.

Stress: Stress can produce difficulty sleeping at night due to constant worry and thinking about a problem at bedtime. Some individuals will repetitively awaken at night dwelling on and thinking about a problem. Sleeping medications are a poor choice, unless the stress is very short-lived. The problem is, of course, the stress itself. Oftentimes we simply cannot remove the stress, and thus sleep hygiene becomes even more important.

Stress always needs to be treated. Sometimes a program of stress management can help, sometimes medications can help, and sometimes simply eliminating the cause of stress is the only thing that will help.

Learned problems: Sometimes an individual will develop a difficult time sleeping, because they have learned to do so. There are some individuals who are so worried and concerned about their sleep that they will lie awake at night worrying about whether they will go to sleep. The rest of their sleep hygiene is perfect; they simply worry about falling asleep. They have actually "learned" not to sleep well. This is a special problem, but one should not assume that this is a major factor until virtually all the other factors pertaining to sleep hygiene have been corrected.

Other individuals will "learn" to not sleep well because of other factors. For example, international travelers who constantly expose themselves to travel may get their internal time clock mixed up. They will fly from Honolulu to Tokyo and then fly back to Honolulu. The body gets mixed up as to which time zone it should be on. Consequently, they do not sleep well in either place. Although this is jet lag, it is also a form of a learned sleep problem.

Sleep medicine has specific names for this kind of sleep problem. The treatment of this kind of a sleep problem is similar to treating jet lag, but not identical.

## EXERCISE

Exercise is crucial for healthy sleep. When we are young, exercise may take the form of vigorous athletic activities, but as we age brisk walking may be all that is needed. Exercise stimulates the body and the circulation, and sleep comes more easily. As a general rule, an individual should have 30 to 60 minutes of exercise three times per week.

The best way to exemplify this is by giving an example. Think of an elderly patient who simply wants to lie in bed all day and sleep. When night comes, such an individual is not sleepy at all and stays up at night. Sleep is poor, and family members are disrupted by the elderly family member calling for help and "hallucinating." Had this elderly person simply exercised during the day, which may have been nothing more than sitting up during the day, this cycle of sleep during the day and poor sleep at night would have been reversed. Exercise also makes us tired, and the sleep is more restful.

## JET LAG

"Jet lag" refers to the sleep problems a person experiences when they travel by airplane to a part of the world on a different time zone. Changes in time zone as little as two hours can affect many people, and changes in time zone of over six hours will affect everyone.



As a general rule, it is easier to travel in a direction where your days become longer (west bound) as opposed to traveling in a direction where your days become shorter (east bound). Thus, it tends to be easier when traveling from Los Angeles to Honolulu rather than traveling from Honolulu to Los Angeles.

As a general rule, it takes one day for the body to adjust to a one hour time change. If you travel from Honolulu to Denver, Colorado, and there is a three hours time difference, you probably will not feel quite "right" for three days.

Some people are far more susceptible to the problems of jet lag than others. The following hints can help those susceptible people.

- Set your time of arising and sleep to your target destination before your trip. Remember the time difference, and you can predict how many days before travel you must set your new sleep time in order to have less jet lag when you arrive at your destination.
- If you travel at night, either do not have a heavy meal or do not eat at all.
- Expose yourself to bright sunlight for several hours each morning at your new destination.
- Drink no alcoholic beverages until you are over your "jet lag."

Some sleep experts suggest that short acting sleeping medications can help to overcome jet lag.

## MEDICAL DISEASES

There are several specific medical disorders which produce difficulty sleeping at night and/or sleepiness during the day. These specific medical diseases are much less common than difficulty sleeping produced by poor sleep hygiene. This is the reason that a thorough medical evaluation is necessary before diagnosing and treating a sleep disorder. Thus, whether you do or do not have one of these medical disorders, good sleep hygiene comes first. Some specific and recognized disorders are:

Sleep apnea: Sleep apnea is a specific medical disorder where an individual stops breathing at night. Normally, such an individual snores loudly and has been observed to stop breathing at night by a friend or family member. There are oftentimes secondary medical problems such as high blood pressure, stroke, heart attacks at night, or heart failure. Although many patients with sleep apnea are obese, some of the most severe individuals are thin. Sleep apnea is an important disease because it is extremely easy to treat, it is very common, and complete recovery is the rule. However, good sleep hygiene still comes first. Only an overnight sleep study can make a specific diagnosis of sleep apnea so that treatment can be rendered.

Pain: Chronic pain of any kind can disrupt sleep. The quality of sleep is poor and at times repetitively disrupted. Adequate pain control is absolutely necessary. Unfortunately, sometimes the medications we take for pain control disrupt sleep. This balancing act of pain versus the medications must be coordinated by your doctor so that your sleep does not suffer.

Periodic Leg Movements in Sleep (PLMS): PLMS is a medical condition where legs involuntarily move at night. Some individuals are aware of this and some are not. Sometimes only the spouse notices this, and sometimes no one does. The result is that the repetitive moving of the legs does not allow an individual to have a restful night of sleep and daytime sleepiness results. Only an overnight sleep study can make a specific diagnosis of a "PLMS" syndrome such that treatment can be rendered.

Gastric reflux: Gastric reflux is a condition that produces heartburn at night. A person may have no problems during the day, but once they go to sleep they are awakened by a feeling of chest pain and burning. Taking antacids at that moment will usually help the problem, but it tends to occur repetitively. These disruptions at night will prevent a restful night of sleep, and daytime sluggishness and sleepiness can occur. In some instances, an individual does not actually wake up, but their sleep lightens due to the discomfort, and they are tired and sleepy during the day and do not understand why. Gastric reflux is another one of the medical conditions that can be specifically identified and treated.

Other Medical Conditions: What you have just read encompasses the majority of the sleep problems of individuals worldwide. The remaining disorders represents unusual disorders of sleep. Although some of these could apply to you, please bear in mind that these are unusual. Some of these include "REM sleep behavior," "sleep drunkenness," "sleep terrors," "nocturnal seizures," and other unusual forms of problems during sleep. Again, an overnight polysomnographic recording is usually required to make these diagnoses, usually with an infrared camera available to record movements in the dark on a VCR recorder. In some unusual circumstances even a fancier EEG recording is required. However, common things are common, and poor sleep hygiene is the most common problem.

***I understand all of this, but can you summarize things for me so I can at least get started?***

All the points you have read are crucial for your understanding of sleep hygiene. However, some of the more important points include:

1. Get out of bed at the same time everyday, regardless of when you get into bed. Always keep regular sleep hours. Make sleep a priority.
2. Go to bed only when sleepy, ideally at the same time each night. If you cannot sleep after ten minutes, get up and read and then try to sleep again. If you once

again cannot sleep in about ten minutes, get up and read again and cyclically do this until sleep occurs. However, always get out of bed at the same time the next morning.

3. Establish relaxing pre-sleep rituals such as a warm bath, a light bedtime snack (such as milk and cookies), or ten minutes of reading.
4. Exercise regularly. Get vigorous exercise such as jogging or tennis in the late afternoon, and mild exercise such as simple stretching or walking two to three hours before bedtime.
5. Take special care of your sleeping environment. Decrease or eliminate all extraneous noise. Maintain a regular temperature and eliminate unnecessary light.
6. Decrease anxiety in your life particularly near to your hour of bedtime.
7. If insomnia is your main problem, try the following:
  - A. Jot down when you go to bed, get up, consume coffee and alcohol, exercise, and other habits that you suspect may be affecting your sleep. Keeping a sleep log for a week or two often identifies trouble spots for yourself or your doctor.
  - B. Avoid caffeine within a minimum of six hours of bedtime. Avoid alcohol and cigarette smoking at bedtime.
  - C. Do not nap unless you find naps do not interfere with sleep later on. In other words, keep a regular sleep schedule at night.
  - D. Reserve your bed for sleep and sex only. Do not, for example, use your bed or bedroom as a place to watch television, as an office, or other activities.
  - E. If you are a bedtime "worrier," dedicate another time, say 30 minutes after supper, to writing down both problems and solutions and do your worrying and problem solving at that time.
  - F. If you cannot sleep, do not stay in bed fretting. Go on to other activities and try sleeping later.
  - G. Try spending less time in bed. If your doctor has determined that no unrecognized physical disorder plays a role in your insomnia such as sleep apnea, consider sleep restriction. This new anti-insomnia treatment is based on the finding that many insomniacs spend excessive amounts of time in bed hoping to make up for lost sleep, but their sleep problem actually worsens.

The best general strategy is initially to go to bed much later than usual and stay in bed only as long as you actually sleep, even if that is only a few hours. Get up at the same time each morning. Once you sleep at least 90% of your time in bed for five days in a row, you may go to bed 15 minutes earlier. After a week or two on a curtailed sleep schedule, you should start to sleep better, and after a few months, you should be sleeping as long as desired. While this technique can be employed on a do it yourself basis, it generally is more easily accomplished under the supervision of a sleep specialist experienced in its use.

**What do I do if I correct all of these sleep hygiene problems but still have a hard time sleeping?**

First, be sure that you truly have corrected all of your problems in sleep hygiene. Do not assume that the single cup of coffee "doesn't apply to me" or "just because I am awakened at night by my newborn child, really does not make any difference." They both do make a major difference. Do not rationalize, "The wine that I drink at night really helps put me to sleep and that cannot be the problem," or "I simply don't have the time to exercise; I am too busy."

If you have done all you can to correct these problems in sleep hygiene and insomnia persists, you need specific help. An overnight sleep study...polysomnographic recording...is usually done next. This overnight sleep study specifically zeros in on some of those treatable medical disorders that can produce sleepiness during the day and a difficult time sleeping at night. However, please understand that a sleep study is not a fool-proof test and that a specific treatable disease may not be identified. You may then be told to "go back to the drawing board" and review your problems with sleep hygiene.

If you are asked to undergo a sleep test, you may be interested in the following:

The sleep laboratory at the Kuakini Medical Center is the most sophisticated in the State of Hawaii. You will be monitored by technicians using State-of-the-Art devices including computers, infrared cameras, oximeters, impedance bands, and other devices. Although a preliminary report will be available the next day, the final report will take several weeks.

**In Summary:**

Difficulty sleeping at night with problems during the day is one of the most prevalent medical problems in the world. Fortunately, there are only a set number of things that produce these problems. The vast majority of them can be easily corrected although they may require a change in your lifestyle or the use of specific medical devices or treatment. Life is simply too short to sleep poorly at night and feel miserable the next

day, particularly when effective treatment is available. If you have more questions about sleep hygiene, you may contact the following two individuals:

~~Edward J. Morgan, M.D... (808) 521-8305  
Specialist in Sleep and Breathing Disorders~~

~~Sonia Lee-Gushi, RPSGT... (808) 547-9119  
Registered Polysomnographic Technologist  
Pulmonary Sleep Disorders Center~~

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