



# Knee Replacement Surgery

at White Memorial Medical Center

WhiteMemorial.com  
(323) 268-5000

*White Memorial Medical Center*  
 Adventist Health

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## WELCOME AND INTRODUCTION

Dear Patient and Family,

White Memorial Medical Center is committed to providing the highest quality of care for patients undergoing knee replacement surgery. In order to achieve this goal, we have established the Joint Replacement Center with a dedicated orthopedic unit staffed by well-trained teams, a joint replacement program nurse coordinator and board-certified joint replacement surgeons.

Our center has adopted and implemented the latest evidence-based clinical practice guidelines and technologies designed to shorten hospital stays, achieve superior clinical outcomes and enable quicker recovery and rehabilitation.

One of the most important components of our program is to educate our patients regarding their upcoming procedure, hospital stay and rehabilitation. In order to achieve this goal, we have put together this patient education booklet that answers most of our patients frequently asked questions. Please take some time to review its contents. We are confident that the more you participate in your care, the better your overall experience will be.

Thank you for choosing White Memorial Medical Center for your health care needs. Please be assured that we are here for you.

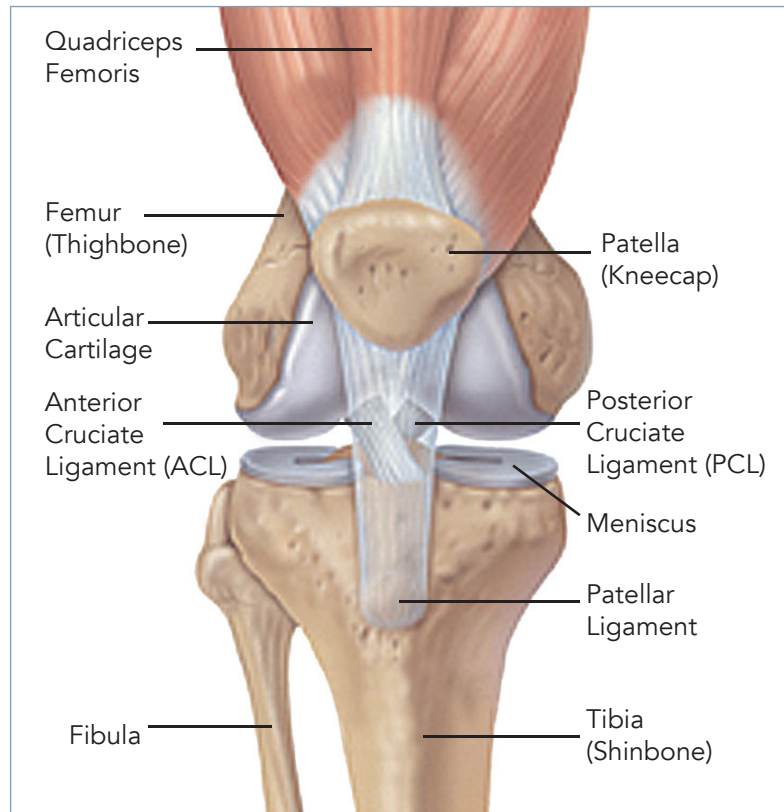
Sincerely,  
Your WMMC Orthopedic Team

## GENERAL INFORMATION

### The Knee

A healthy knee bends easily and rotates slightly. The joint absorbs stress and moves smoothly, allowing you to walk, squat and turn without pain.

The knee is a hinge joint, formed where the thighbone (femur) and the shinbone (tibia) meet. The joint is covered with smooth tissue called cartilage, which absorbs stress, allowing the knee to bend easily. Muscles help power the knee and leg for movement, while tendons attach the muscles to bones and ligaments connect bones, bracing the joint.



## What Is Knee Replacement?

Knee replacement surgery involves resurfacing the worn ends of both bones in a damaged joint and replacing them with artificial components, creating a new smooth cushion and a functioning joint.

There are two types of knee replacement: total and partial knee replacement. Up to three bone surfaces may be replaced with a total knee replacement: the lower ends of the thighbone (femur), the top surface of the shin bone (tibia) and the back surface of the knee cap (patella). The removed cartilage and bone from the femur and tibia are replaced with metal components that recreate the surface of the joint. These metal parts may be cemented or “press-fit” into the bone. The tibial component is typically a flat metal platform with a cushion of strong, durable plastic called polyethylene. The patellar component is a dome-shaped piece of polyethylene that duplicates the shape of the kneecap. If joint damage is limited to just one or two compartments of the knee, a partial knee replacement may be performed.

Your surgeon will determine the right course of treatment for you.



Partial knee replacement



Total knee replacement

## PREPARING FOR SURGERY

### Registration and Pre-Operative Assessment Appointment

After your surgery has been scheduled you will be given an appointment for your pre-assessment evaluation at the Patient Intake department at White Memorial. If you have any questions please call our Patient Intake department number at (323) 268-5000 ext. 2464. Monday thru Friday from 9 a.m. to 5 p.m.

### Pre-Operative Assessment Appointment

A completed pre-operative appointment is required before your day of surgery. During your pre-operative visit, we will work with you on the following:

- Insurance verification.
- Physical assessment.
- Pre-operative diagnostic tests, including blood work, urine test, chest x-ray and electrocardiogram (EKG).
- Allergies, if any, to medication, food or metal.

### What to Bring

- Valid picture ID with your full name and current address.
- Home and cell phone number.
- Social security information.
- Insurance card.
- Medications you are CURRENTLY taking (including dose and frequency)
- Copy of your advance directive (if you have one).
- Name, address and phone number of your care partner/person who will be with you after surgery.
- This booklet.

## Advance Directives

- **Advance directives** are a means of communicating the patient's wishes regarding health care to all caregivers.
- **Living wills** are written instructions that explain your wishes for health care if you have a terminal condition or irreversible coma and are unable to communicate.
- **Appointment of a health care agent** (medical power of attorney) is a document that lets you name a person (your agent) to make medical decisions for you.
- **Health care instructions** are your specific choices regarding the use of life-sustaining equipment, hydration and nutrition, and use of pain medications.

## Joint Replacement Pre-Op Education Class

We strongly recommend that you and your care partner or family member attend this class so you can be informed and educated regarding your upcoming surgery. Each session is taught by a joint replacement coordinator and a physical therapist. You will learn everything you need to know about your hospitalization, including:

- The pre-admission process.
- What happens before and after surgery.
- What happens during your hospital stay.
- How to manage pain.
- Equipment that you will need.
- How to prepare for discharge.
- Exercise, activities and self-care.
- How to be more involved in recovery.

## Class Information

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Location: \_\_\_\_\_ Contact: \_\_\_\_\_

Notes: \_\_\_\_\_

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## How to Register for Classes

Please call (323) 268-5000 ext. 2464. When you register, be prepared to leave a message with the following information:

1. Your name.
2. Your phone number.
3. Type of surgery (hip or knee).
4. Date of surgery.
5. Your surgeon's name.
6. The date you are able to attend.

## Is there a cost to attend?

Classes are offered **FREE** of charge.

## Parking

You can park in the main parking structure (L1) off East Cesar E. Chavez Avenue. Please note there is a **fee to park** in the structure. **Street parking is free except for street cleaning days.** Please refer to the map on the back page of this booklet.

## Special Instructions on the Day of Surgery

- Do not eat or drink anything (including water) after midnight before your surgery. An exception is sometimes made for later surgeries—you will be instructed if this is the case.
- You may be instructed to take some medications the morning of your surgery. Take them with a small sip of water.
- If you are diabetic, do not take any medication for your diabetes unless instructed by your doctor. Your blood sugar will be checked when you arrive at the hospital.
- Plan to arrive at the hospital two hours before your scheduled surgery. Follow your physician's special instructions if given.



## HOSPITAL CARE

# The Day of Surgery

It is important to be at the hospital at your expected arrival time. WEAR COMFORTABLE CLOTHES. Remember not to eat or drink anything including water, mints or gum after midnight the evening prior to your surgery.

## Where to Go

- Enter the main hospital entrance parking lot off of East Cesar E. Chavez Avenue.
- Proceed to the main lobby of the hospital tower to check in for your procedure.
- Family members can go to the surgical waiting room. Your family will be informed once surgery is done. If your family cannot stay, please inform the nursing staff.

## Surgery Duration

The surgery is approximately 2 to 2½ hours long. Some of this time is used by the operating room staff in preparation for surgery.

## Anesthesia

Your anesthesiologist will meet with you before surgery. At that time, the anesthesiologist will examine you, discuss your medical history and determine the best plan for your anesthetic care. It is important to tell your anesthesiologist of any prior problems or difficulties you have had with anesthesia, control of pain or previous surgeries.

## Recovery

After surgery, you will be transported to the recovery room as you recover from the effects of anesthesia.

You will be hooked up to devices that will monitor your progress and check your vital signs such as your blood pressure, heart rate and respirations. After your stay in the recovery room, you will be transported to the orthopedic unit, where you will stay for the duration of your recovery in the hospital.

## WHAT TO EXPECT AFTER SURGERY

### Nursing Assessments

Once in the orthopedic unit after your surgery, your nurse will check on you frequently to monitor your vital signs, circulation, incision, level of consciousness and pain.

### Recovery

You will receive an IV infusing fluids and antibiotics for at least 24 hours. It is important to drink plenty of fluids to prevent blood clots, elevated temperature and constipation.

A catheter may be inserted to drain your urine. It will be removed before you are discharged.

### Diet

Nausea after anesthesia is very common. It is important to inform the nursing staff if you are nauseous so they can give you medication to help manage your symptoms. Once your nausea has passed, you can start eating ice chips and taking small sips of water, then go on to eating a regular diet.

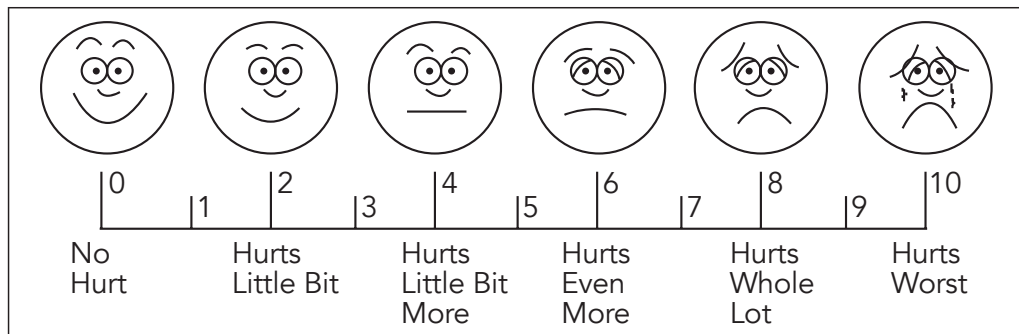
*DIET TIPS: Increased protein helps assist in healing; increased iron helps your blood count to recover (increasing energy); fiber and fluids help avoid constipation.*

### Pain Management

Our priority at WMMC is managing your pain. There are different ways that may help to control it. Speak to your doctor to plan your pain management.

- **Patient Controlled Analgesia (PCA):** A pump that releases medication through your IV. You control the pump by pressing a button to manage your pain. It is set to deliver small amounts of medication at intervals to avoid an overdose. Only you are allowed to press the button.

- **Intravenous or Intramuscular Injections:** Injections given every 2-4 hours as needed for pain. You **MUST** let the nurse know you are in pain, since the injections are not scheduled.
- **Pills** - Usually starts with a mild narcotic to help control your pain.
- **Pain Scale** - Helps describe the level of pain you are experiencing. It is based on a scale of 0-10. It is our goal to keep your pain level at a four or below, or whatever is acceptable to you.



## Pain Tips

Some pain is normal after major surgery, but it should not get in the way of activities such as deep breathing, turning in bed or progressing in your activities.

- Let your nurse know before your pain gets worse. It is easier to manage pain before it gets worse.
- If the pain medication is not working, let the nurse and your doctor know.

## Physical Therapy and Mobility

Physical therapy may begin on the day of surgery or on the first day after your surgery and will occur twice a day. The physical therapist will teach you exercises to strengthen your legs and improve your walk. Occupational therapists will work with you on activities of daily living such as using the bathroom, bathing, dressing and grooming.

## Equipment

You will be instructed to do breathing exercises (10 breaths every hour) with an incentive spirometer to prevent pneumonia.

You will have foot pumps or leg squeezers to prevent blood clots.

You may use a walker, raised commode or other equipment to assist in your daily activities.

## Discharge Plan

Most patients are in the hospital for one or two days, then are discharged home.

Someone responsible needs to drive you home. You will receive written discharge instructions about medications, physical therapy, activities, etc. Take this notebook with you.

When you are ready to go home, a case manager will be able to help you regarding discharge management, to make sure that your transition home is smooth.

## Follow-up Care

You will need to see your surgeon for a follow-up appointment after surgery. Your follow-up appointment is on:

**Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

**Location:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

## EXERCISES

The following exercises should be done 2 times a day before and after surgery.

### Strengthening Your Knee



1. Lie backside down on bed/couch.
2. Flatten knee by keeping your leg straight.
3. Press knee down towards bed/couch.
4. Breathe in, then breath out and relax.
5. Repeat 10-20 times.

### Strengthening Your Knee



1. Lie backside down on bed/couch with a rolled towel or blanket under thigh.
2. Lift foot, straighten knee.
3. Do not raise thigh off roll.
4. Hold for 5 seconds.
5. Relax and repeat 10-20 times.

### Heel Slides



1. Lie backside down on bed/couch.
2. Slide heel, bending your knee, to your bottom.
3. Slowly straighten leg back down.
4. Repeat 10-20 times.

### Strengthening Your Knee and Hip



1. Lie on your back, keeping the non-operated leg bent and foot flat.
2. Keep knee straight and point toes to the ceiling.
3. Lift operated leg up six inches.
4. Relax and repeat 10-20 times.

The following exercises should be done 2 times a day before and after surgery.

## Strengthening Your Arms



This exercise will strengthen you for walking with crutches and walkers.

1. Sit at edge of an armchair.
2. Place your hands on armrests.
3. Place pressure on armrests and raise bottom up, like you are about to stand.
4. Relax back into chair and repeat 10-20 times.

## Ankle Stretch



1. Stand, holding onto a firm surface.
2. Lift heels and stand on your toes.
3. Relax and repeat 10-20 times.

## Knee Bends



1. Sit on a chair with back straight, feet flat on floor.
2. Bend operated leg underneath chair, as far back as possible.
3. Plant your foot by moving your bottom forward on the chair.
4. Hold 10-20 seconds.
5. Relax and repeat 10-20 times.

The following exercises should be done 2 times a day before and after surgery.

### Hip Strengthening



1. Lie on back, slide leg out to side.
2. Point toes to ceiling and keep knee straight.
3. Bring legs back together.
4. Repeat 10-20 times.

### Knee Extension



1. Sit with your back straight.
2. Straighten knee.
3. Relax and repeat 10-20 times.

### Range of Motion and Strengthening Exercise



1. Flex toes toward knees.
2. Push foot forward as far as you can to fully stretch calf muscles.
3. Relax and repeat 10-20 times FOR BOTH FEET.

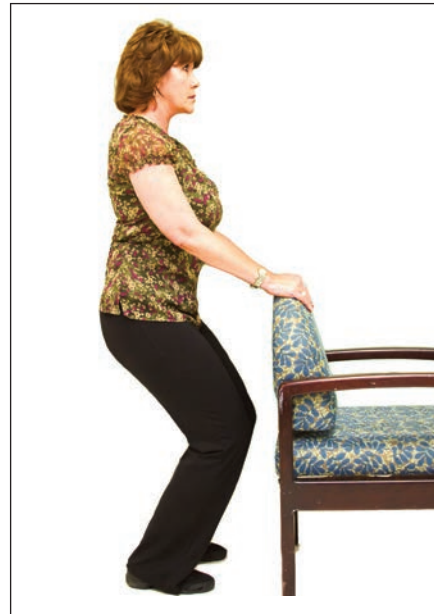
The following exercises should be done 2 times a day before and after surgery.

### Knee Stretch



1. Stand, holding onto firm surface.
2. Bend operated knee behind you.
3. Return to standing position.
4. Relax and repeat 10-20 times.

### Quarter Squat



1. Stand, holding onto firm surface, with feet shoulder-width apart.
2. Bend knees at a 30-45 degree angle.
3. Return to upright position and repeat 10 times.

### Lying In Bed – Keep Knee Straight



**Caution: DO NOT bend knees low enough to cause pain.**

1. **DO NOT** put pillow directly under knee.
2. Place small pillow under ankle.
3. Knees should **STAY STRAIGHT**.



## PERSONAL CARE

## Precautions and Home Safety Tips

### How to Get Into a Car



1. Put car seat back all the way.
2. Back up until you feel the car touch the back of your leg.
3. Reach back for car seat and lower yourself down. Keep operated leg straight in front and duck your head to avoid hitting door frame.
4. Turn frontward, lean back, then lift operated leg into car.

### How to Get Out of a Car



1. Recline seat back all the way.
2. Turn body slowly, lifting legs out of car first.
3. Move forward, slide operated leg out in front.
4. Hold walker or crutch firmly with one hand and push off car seat with other hand.
5. Stand by putting weight on hands and non-operated leg. Regain balance before moving.

## Toilet Transfer



You may need a raised toilet seat or a three-in-one bedside commode for the first several weeks after surgery, or as directed by your physician.

### Sitting down on the toilet:

1. Take small steps to turn your back to the toilet. DO NOT pivot or twist knee.
2. Back up to toilet until you feel it touch the back of your leg.
3. If using a commode with armrests, reach back for both armrests and lower onto toilet.
4. If using a commode without armrests, keep one hand on walker while reaching back for the toilet with the other and lower onto toilet.
5. Slide operated leg in front when sitting.

### Getting up from the toilet:

1. If using a commode with armrests, use them to push up. If no armrests are available, place one hand on the walker and use the other to push off the toilet seat.
2. Regain balance before reaching for the walker.

## Getting Dressed/ Undressed



### Putting on pants and underwear:

1. Make sure you're sitting down.
2. Use reacher or dressing stick to grab/guide waistband over foot. Put operated leg in first, then non-operated leg.
3. Pull up pants over knees, within easy reach.
4. Stand with walker in front to pull your pants up the rest of the way.

### Taking off pants and underwear:

1. Back up to the chair or bed where you will be undressing.
2. Unfasten pants and let them drop to the floor, then push underwear to knees.
3. Lower yourself down, keeping operated leg straight.
4. Use reacher or dressing stick to undress non-operated leg first, then operated leg.

## Sock Aid



Use a sock aid if you are having difficulty reaching your feet.

1. Sit down.
2. Slide sock onto sock aid with toe completely tight at the end.
3. Hold the cord and drop the sock aid in front of your foot.
4. Slip foot into sock aid.
5. Keep knee straight, point toe and pull sock on.
6. Keep pulling until sock aid pulls out.

## Using a Long-Handled Shoehorn



1. Use a long-handled shoehorn to slide your shoe in front of your foot. Bend your knee as much as possible without causing pain.
2. Place shoehorn inside shoe against back of the heel. The curve of the shoehorn should match the curve of your shoe.
3. Lift leg and place your toes in your shoe. Lean back if necessary.
4. Step into shoe, sliding your heel down the shoehorn.

**NOTE:** Wear sturdy slip on shoes or shoes with Velcro closures or elastic shoelaces.

**DO NOT** wear high heels or shoes without backs.

## HOME CARE

# Caring For Yourself At Home & Preventing Complications

## Equipment

Your physical and occupational therapists will recommend any necessary equipment, such as a walker, cane, shower chair or commode. This equipment will be delivered to the hospital before discharge or to your home. There is no need to buy them ahead of time.

## Caring for Your Incision

- Keep your incision clean and dry.
- Do not get your incision wet until you have been instructed to do so.
- Avoid soaking your incision in a tub bath, hot tub or participating in water activities until instructed by your surgeon to do so.
- Notify your surgeon or nurse if there are any signs of INFECTION:
  - Increased drainage
  - Redness
  - Pain
  - Odor
  - Heat around the incision

## Driving

You will not be able to drive for the first few weeks after surgery unless otherwise instructed by your doctor.

## Sexual Activity

You may resume sexual activity, with CAUTION, once your surgeon clears you. If you have any questions about observing precautions, do not hesitate to ask your surgeon.

## MEDICATION MANAGEMENT

### Pain Medication

- Take your pain medication at least 30 minutes before your scheduled physical therapy.
- Change your position every 45 minutes throughout the day.
- Prescription pain medications contain narcotics, which can cause constipation. Increase fluid and fiber intake or use stool softeners or laxatives if necessary.

### Blood Thinners

Surgery may cause blood to slow and clot in the veins of the legs. You may be prescribed blood thinners to prevent blood clots after discharge.

Depending on the type of blood thinner, you may need to get your blood drawn to check your blood-thinning level. You should watch for blood in the urine, nosebleeds, bleeding gums and excessive bruising, as these may be signs that your blood is too thin. Please call your physician promptly if you have any of these symptoms.

## Recognizing & Preventing Potential Complications

### Blood Clots

Blood clots can form in a leg vein and in your lungs after surgery and can be very dangerous. Signs of a blood clot include pain in the back of the knee, warmth and excessive thigh swelling that persists even with leg elevation. Contact your orthopedic surgeon promptly if you have these symptoms.

## Prevention of Blood Clots

- Medications: Blood thinners such as Coumadin, aspirin, Xarelto® or Lovenox prescribed by your physician.
- Foot and ankle pump exercises.
- Walking.

## Living With Your New Joint

To ensure the health and effectiveness of your new joint, it is important that you care for your new knee.

## Joint Protection

All joint replacement patients need a regular exercise program to maintain their fitness and the health of the muscles around their joints. With both your orthopedic and primary care physicians' permission, you should be on a regular exercise program 3-4 times per week lasting 20-30 minutes each session.

Be sure to follow your surgeon and therapist's advice on using a walker, crutches or cane for a specified amount of time after surgery. Following this advice and the precautions given to you are important for the early healing of your new joint.

## Sports and Activities

Your new prosthesis is designed for activities of daily living, NOT high impact sports. Walking, swimming, cycling and golf are recommended once cleared by the surgeon. High-risk activities such as skiing, running, jumping, rock-climbing and heavy lifting should be avoided since they may compromise the long-term success and function of your new joint and may also increase the risk of fractures around the prosthesis.



## Follow-up Care

Routine follow-up appointments are very important after discharge. Expect to receive a phone call from the hospital to monitor your condition. The number of follow-up visits will depend on your progress.

## RESOURCES AND REFERENCES

### **White Memorial Medical Center**

1720 East Cesar E. Chavez Ave.

Los Angeles, CA 90033

Phone: (323) 268-5000

WhiteMemorial.com

### **Krames - The StayWell Company**

Toll-free hotline: (800) 333-3032

Krames.com

### **Joint Commission**

One Renaissance Blvd.

Oakbrook Terrace, IL 60181

General Number: (630) 792-5000

Joint Commission Disease Specific Care Program: (630) 792-5291

JointCommission.org

### **American Association of Orthopedic Surgeons (AAOS)**

Phone: (847) 823-7186

AAOS.org

### **American Association of Orthopedic Nurses (NAON)**

Phone: (800) 289-NAON (6266)

OrthoNurse.org



## PRE-OPERATIVE TOTAL JOINT REPLACEMENT

Surgeon: \_\_\_\_\_

Surgery date: \_\_\_\_\_

Time to arrive at the hospital: \_\_\_\_\_

Return to your orthopedic physician for final pre-op check up on: \_\_\_\_\_

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### Please bring this book with you to:

- Every office visit.
- Your joint replacement class.
- The hospital on admission day.

### Acknowledgements

**This project was developed through the cooperation and collaboration of the following:**

White Memorial Medical Center  
Orthopedics/Physical Medicine & Rehabilitation

Adventist Health Home Care Services

WMMC Orthopedic Surgeons

WMMC Orthopedic Nursing Team





## CAMPUS MAP



## PARKING INTRUCTIONS

For surgery patients, parking is provided in Lot 1 (L1) off of Cesar E. Chavez Avenue. Walk over to the main entrance for patient intake.

## OUR MISSION

To share God's love with our community by promoting healing and wellness for the whole person.

**White Memorial Medical Center**  
**Adventist Health**

White Memorial Medical Center  
 1720 East Cesar E. Chavez Avenue  
 Los Angeles, CA 90033

(323) 268-5000 General Information

WhiteMemorial.com  
 @WhiteMemorialLA

