Dance requires unusual repetitive movement around the hip joint; that movement demands extreme control. Fast and fancy hip movement is the signature for spicy Latin dance. Modern dancers have the strength and agility to work their hips in all planes while shifting weight and still maintaining balance. Tap dancers can move their feet and legs with impeccable speed while the pelvis holds steady. Ballet dancers show off the height of the développé by maintaining strength and flexibility in their hips. All dancers need to understand how the forces of leg movement are distributed through the hip joints and pelvis. Each dance style requires the thigh to work in parallel and internally and externally rotated positions at various times. Understanding how your pelvis works in coordination with your legs can enhance your technique. Your goal is to achieve the desired movement of your legs without losing control of your pelvis.

This chapter focuses on understanding pelvic alignment and femur (thigh) movement. Your pelvis is powerful when organized and balanced. All core musculature inserts into the pelvic region, and most muscles of the thigh originate from the pelvic region—this is quite a powerful intersection! Think about it: Your body’s core musculature inserts into the pelvic region, and your leg muscles begin at the pelvis. Your pelvis is the link between your trunk and your legs.

You must learn to move from your center, and your pelvis is the base of your center. It is made up of the ilium, ischium, and pubic bones on each side (figure 6.1). The sacrum is discussed as part of this group as well because it connects the spine with the pelvis. The sacrum is wedged in between the two pelvic bones at the base of the spine. Your center of gravity actually lies just in front of your sacrum. To maintain a balance on one foot, you must maintain your center of gravity in a vertical line that passes through your foot to the floor. Visualize your pelvis and sacrum located over your standing leg for security in balancing.

Along the side of the pelvis is the acetabulum, or deep hip socket. This is the cuplike socket where the head of the femur (thigh bone) inserts. Your femur is the strongest and longest bone in your body. This deep hip socket allows your femur to lift forward, or extend back into arabesque. The acetabulum also allows your thigh to battement to the side as well as turn in or out. The head of the femur angles downward, forming the neck; then it creates two bony prominences: the lesser trochanter and greater trochanter. The lesser trochanter is located medially and the greater trochanter is located laterally. Both of these prominences are important because of the muscles that attach
at these points. These muscles help create pelvic stability for your standing leg as well as dance movement for your gesture leg.

Before we continue with alignment and muscles, let’s get familiar with the term hip disassociation. This term means isolating movement at the hip, separate from the pelvis or spine. Try to tighten the gluteus maximus muscle, and maintain that tightness while you kick your leg to the front. What happens? It’s next to impossible to get any height out of the thigh as long as the muscles of your buttocks remain tight! Now, try it again and lengthen the muscles of your buttocks as the leg goes up. So, if you understand the principle of the core musculature inserting into the pelvic region and leg movement starting at the pelvic region, then imagine moving your thighs at the hip joint only. Think about executing a large fan kick; an extremely stable pelvis allows the working leg to relax in the socket to produce fluidity and greater range of motion. The hip joint can better absorb forces that might be harmful to the lower spine.

When you kick (battement) your leg to the front, the anterior muscles contract and the posterior muscles release and lengthen eccentrically. Think back to the discussion of concentric and eccentric muscle work in chapter 1. Concentric contraction describes shortening of the muscle with contraction, and eccentric contraction describes lengthening of the muscle fibers but maintaining strength and muscle tone. When you kick your leg to the front, the gluteus maximus and the erector spinae in your lower back can be trained to lengthen eccentrically while you engage your core to maintain lower-back and pelvic stability. Hip disassociation is the ability to isolate movement at the hip joint independent of your pelvis and spine.

**Pelvic Link**

You already know that the majority of your injuries occur in the lower extremity. If these injuries are not acute (occurring suddenly), then they are related to faulty technique. Faulty technique usually occurs from poor alignment in the
lower spine and pelvis. The iliopsoas muscle is the magic link that connects the lower spine and pelvis with the femur. The psoas connects the lower spine to the femur at the lesser trochanter; the iliacus connects the pelvis to the femur at the lesser trochanter (figure 6.2). Weakness and tightness can result in misalignments of the lower back and pelvis, which then trickle down to the legs. For example, the iliopsoas crosses over the hip joint and can cause snapping as the leg comes down from développé or grande battement. The snapping usually occurs when the iliopsoas tendon moves over the head of the femur or the lesser trochanter; it can produce pain and can develop into an injury that needs to be assessed by a physician. Maintaining strength with turnout throughout the entire range of motion allows the iliopsoas to function in a position that reduces the snapping. Maintaining flexibility can also help keep the tendon from snapping. Typically, the iliopsoas is tight and weak.

The iliopsoas muscle is the major hip flexor; it flexes your hip so you can lift your leg above 90 degrees. Visualize the location of the iliopsoas as it travels from the lower spine to the inside of your upper femur. Imagine the muscle fibers shortening, bringing the femur closer to your trunk. You know that in order to compete, audition, or simply get better as a dancer, you have to get your legs up in the air! There is nothing more frustrating than fighting with your thighs to get your legs up above 90 degrees. (More on that problem in chapter 7.)

Since the iliopsoas originates on the anterior aspect of the lower-spine vertebrae, when it is tight it will pull your lower spine into extension, which tilts the front of the pelvis forward. Even if you understand the concept of trying to hold your pelvis in a neutral position, the movement is next to impossible because your iliopsoas is tight. Dancing in this anterior pelvic tilt and lower-back arch creates inactivity of the abdominals as well as the adductors (inner thigh muscles). This anterior tilt position of the pelvis also causes tightness in the lower-back musculature and creates that shear force against the vertebrae. This book focuses on dance-specific exercises, but the hip flexor stretch in this chapter (page 122) is an important addition. This stretch can be done daily. Try it after your warm-up to encourage effective movement through your hips before you start your center work. Remember your plumb line from chapter 2 and your core work from chapter 4. Reemphasize engaging your core to locate your neutral pelvis position. When you get a correction from an instructor like “Don’t arch your lower back,” sometimes you will overcompensate and tuck your pelvis under to limit the arch. Tucking the pelvis overworks your gluteus maximus. And you know what happens when you overwork a muscle: It gets bigger! Tucking the pelvis also causes tightness in the hamstrings and unusual pressure on the discs of the lower spine. How can you advance your technique when you are constantly fighting to find your placement? Remember to create length through your spine; locate your neutral pelvis position while engaging the deep core to support the lower back. Abdominal strengthening with iliopsoas and lower-back stretching can help you overcome arching your back. This reorganization of your placement will allow you to move on and advance your skills.
Lateral Hip Power

The gluteus minimus and medius connect the outer surface of the ilium with the lateral area of the greater trochanter (figure 6.2). These two muscles help with abduction and hip stabilization. When you perform parallel side lunges or chassés to the side, the hip abductors are working. The wings that tap dancers execute to the side work the gluteus minimus and medius. Typically, these two muscles are very strong in modern dancers because of the numerous side leg lifts and parallel leg work. Another small muscle called the tensor fasciae latae connects the outer ilium with the iliotibial band. The iliotibial band runs from the ilium down the side of the thigh to the lateral femur, patella, and tibia.

Figure 6.2  Muscles of the pelvis: (a) front; (b) back; (c) side.
This is a very strong band of fascia that in some aspects may work as an external rotator along with the tensor fasciae latae. Nevertheless, a large portion of pelvic stability, which you need for your supporting leg strength, comes from the gluteus medius and minimus. While executing the coupé turn-in and passé press exercises (pages 110 and 112), visualize the location of the hip abductors while focusing on maintaining spinal and pelvic stability.

**Control of Pelvic Floor Muscles**

The pelvic floor muscles form the bottom of the core and are critical in supporting the pelvis. These muscles are overlooked in dance technique for various reasons. Many instructors are unfamiliar with the function of the pelvic floor muscles, and dancers are uncomfortable discussing this area. You never hear an instructor give cues about the pelvic floor in technique classes!

As discussed in chapter 4, the pelvic floor is a series of muscles that line the base of the pelvis. Remember the pelvic diamond? Visualize the two sit bones, the pubic bone, and the coccyx bone; visualize the muscles that connect the diamond and form a basin. In a basic modern contraction, the pelvis rocks posteriorly, and the sit bones of the pelvic diamond move together very slightly with the contraction of the pelvic floor muscles. On arching the lower back and tilting the pelvis forward, the sit bones move apart, eccentrically lengthening those muscles. There is also a very slight movement of the sacrum, which creates the connection of the diamond from the coccyx to the pubic bone. For example, a demi-plié in second position should start with the pelvis in neutral. On the downward phase, the hips disassociate, the sit bones move away from each other, and the pubic bone and coccyx bones move away from each other. The opposite occurs on the upward phase. In other words, on the downward phase the pelvis stays neutral and the diamond widens; on the upward phase the pelvis continues to stay neutral and the diamond shrinks. Many of the exercises in this chapter focus on strengthening the pelvic floor to improve technique.

**Rotation of the Femur**

The femur must turn in and out to accommodate all styles of dance. There must be an excellent balance of strength and flexibility between the internal and external rotators. Deep under the gluteus maximus are six small muscles that play a large part in turnout and stabilization of the hip joint. The piriformis muscle connects the sacrum and posterior ilium with the greater trochanter. The obturator internus and obturator externus connect the ischium and pubic bone with the greater trochanter. The gemellus inferior and gemellus superior also connect the lower ischium and sit bones with the greater trochanter. The quadratus femoris also connects the sit bones with the greater trochanter. We’ll refer to these turnout muscles as the “deep six.”

Internal rotation of the femur is shared by several muscles, some of which are discussed in the next chapter. But let’s introduce them now. Two of the hamstring muscles (semitendinosus and semimembranosus) have the ability to internally rotate. The anterior fibers of the gluteus medius and minimus, as
well as the tensor fasciae latae, can assist with internal rotation. Remember that the femur can work in various directions without tucking or tilting the pelvis. Excellent hip disassociation skills allow for more effective hip movement and more core stability.

The majority of the turnout must come from movement in the hip socket. Any time you are required to lift your leg while it’s turned out, initiate the movement by contracting the deep external hip rotators to fully turn out within the hip socket. Maintain the muscle contraction through the entire movement of the leg while other muscles assist. For example, in arabesque, the deep rotators contract but the gluteus maximus assists as a turnout muscle to help bring the hip into extension. Without the contraction of the deep six rotators, your leg would swing back in parallel! When executing plié, allow the rotators to contract to keep the femurs open along the frontal plane and aligned over the toes. On the downward phase, the inner-thigh muscles assist by working eccentrically; on the upward phase, they work concentrically.

Visualize the location of small external rotators as they connect the femur with the sacrum and lower pelvis. As the muscle fibers contract and shorten, the femur laterally rotates in the socket. The femur can turn out in the hip socket without any unwanted movement in the lower back or pelvis, supporting the hip disassociation theory. Practice moving your femur inward and outward while sitting, lying down, and standing. Focus on movement deep within the socket only; notice how you don’t need to twist your pelvis or tuck under to actively rotate your femur in the joint. Just move your thigh, not your pelvis or spine.

Turnout might be physically challenging for you. Familiarity with femoral anteversion will help if you struggle with turnout. Anteversion is a term used to describe the angle of the femur; it means turning forward. This placement in the hip socket causes an abnormal internal rotation of the femur, or toeing in, making it anatomically difficult to execute turnout for ballet. This alignment issue causes an anterior tilt of the pelvis. If you try to force more turnout, you will cause twisting of the knees and rolling in at the foot and ankle. This placement might be your personal anatomy and might never allow perfect turnout. If that’s the case, then learn to work within your hip’s range of motion. Work your feet with less forced turnout and continue to work the turnout muscles properly from the hip. Femoral retroversion is the exact opposite. The angle of the femur allows for more external rotation, or toeing out. This would be more suitable for ballet.

**Dance-Focused Exercise**

While executing the following exercises, think about maintaining stability in your pelvis and lower spine, and allow the femur to move freely in the hip socket. Even though the legs can be directed into so many amazing moves and angles, you can learn to work the muscles effectively. As one group of muscles work to create the movement, the opposing side must lengthen and the core must secure the movement. It’s helpful to inhale on the preparation and exhale on the movement. While working through the
exercises, visualize each muscle’s location. Focus on the muscle action and how it makes your femur move. To challenge your balance skills, close your eyes for some of the repetitions. Repeat some of the repetitions at a faster pace and notice how changes in tempo challenge your stability. Each exercise directly relates to your technique—use the illustrations to learn which muscles work together.
Plié Heel Squeeze

Execution

1. Lie facedown in a slight demi-plié position, with your forehead resting on your hands. Your pelvis must be neutral, not tipped forward with an arch in your lower back. Heels are touching each other. Inhale to prepare.

2. On exhalation, coordinate contraction of the deep abdominals and press the heels together, creating an isometric contraction for the deep rotators and the lower fibers of the gluteus maximus. Hold this position for 6 counts.

3. Relax the contraction as you inhale and prepare to repeat. Push and relax 10 to 12 times.

⚠️ SAFETY TIP Avoid arching the lower back, which will shorten the deep hip flexors and tighten the lower back. Remain in your natural neutral pelvis with abdominals engaged.
**Muscles Involved**

Obturator internus, obturator externus, piriformis, quadratus femoris, gemellus inferior, gemellus superior, lower fibers of the gluteus maximus

**Dance Focus**

One of your goals is to understand the principle of hip disassociation and how it can improve your performance as a dancer in any style of movement. Let this exercise help you to focus on the deep six muscles that externally rotate your legs while resisting the need to tip your pelvis forward or backward. Visualize the femurs working separately from the pelvis. The strength of the contraction and shortening of the deep six should give you the effect of the femurs almost hovering slightly over the floor without strain in the upper thighs or hip flexors. Imagine a grande plié where the thighs are directly to the sides. Also imagine a pas de chat where you are completely turned out along your frontal plane and have a perfectly neutral pelvis.

**VARIATION**

**Supine Plié**

1. Lie on your back with your legs in a slight demi-plié with heels touching. Outside edges of the feet are on the floor. Place a soccer-size ball under each knee. Inhale to prepare.

2. Reemphasize neutral pelvis. On exhalation, gently contract the deep six and press the thighs into the resistance of the balls. Try not to overrecruit the gluteus maximus and pull your pelvis into a posterior tilt.

3. Try this several times to organize the contraction equally with both sides. Hold the contraction for 6 counts; relax with control as you inhale and prepare to repeat.
Coupé Turn-In

Execution

1. Begin while lying on your right side. Your bottom arm is extended on the floor overhead; your head rests on the bottom arm. Your top arm is on the floor in front of you. Locate your neutral position. Your top leg is placed in a parallel coupé position; the foot is just above the opposite ankle and the knee is placed on a ball. Organize your trunk and inhale to prepare.

2. On exhalation, reemphasize stability through the core and pelvis. Maintain a strong lift along the waistline on the floor. Gently press the knee into the ball, contracting the internal rotators. Allow the lower leg to move away from the bottom leg, encouraging more turn-in. Hold for 6 counts.

3. As you inhale, slowly return with placement. Repeat 10 to 12 times, working up to 3 sets. Focus on hip disassociation.

Safety Tip

Anchor your pelvis by reemphasizing core control. Avoid any movement in the lower back. This firm base allows for more fluidity and range of motion in the hip joint and reduces the risk of injury to the lower back. Avoid pelvic tilt; maintain a natural neutral position with the hip flexed.

Muscles Involved

Anterior fibers of the gluteus medius and minimus, tensor fasciae latae
Dance Focus

Strengthening the turn-in muscles is important for maintaining pelvic postural balance. If you have a tendency to walk while your legs are turned out, you may have weakness of the internal rotators; but again, activation must occur without loss of pelvic stability. As you’re working in a turned-in position, visualize the front of the thigh turning toward the midsagittal plane and the head of the femur gliding in a slightly posterior direction. You don’t have to compensate and move in your lower back. Since the gluteus medius and minimus also provide stabilization for the standing leg, adding turned-in exercises to your fitness program will give you multiple positive results. Hip-hop styles of dance that have developed over the years are exciting to watch and require strength in internal rotation of the hips, as do numerous modern movements.

Variation

Turn-In With Resistance

1. Lie on your front with the right knee bent and left leg extended along the floor. Place an elastic resistance band around the outside of your right ankle, with the band pulled across to the left side of your body. Steady it by tying it to a table leg or having someone hold it for you. Inhale to prepare.

2. On exhalation, internally rotate the leg against the resistance of the band. Engage the internal rotators while stabilizing the pelvis. Try to move the leg as far as you can while maintaining an anchored pelvis. Hold for 6 counts.

3. As you inhale, return the leg slowly, isolating the internal rotators and separating the movement from the pelvis. Repeat slowly 10 to 12 times. Work up to 3 sets.
Passé Press

Execution

1. Begin on your right side with the bottom arm overhead and your head resting on it. Your top arm is on the floor in front of you. Place the left leg into passé position and place the foot on the floor in front of the bottom leg. The bottom leg must remain turned out. Feel the outside edge of the left foot against the bottom leg. Reorganize your trunk by engaging your core to feel an added lift along your right side, and inhale to prepare.

2. On exhalation, engage the deep abdominals and begin to contract the deep six rotators, opening the thigh along the frontal plane. Continue the stretch, pressing your leg into the resistance of a partner’s hand. Hold for 6 counts and slowly return to prepare to repeat 10 to 12 times.

3. As the deep contraction occurs, feel the separation of your thigh from your pelvis and supporting leg. Keep the turnout working with the bottom leg as well. Resist twisting of the pelvis—you are moving your thigh, not your pelvis.

4. To advance this exercise, repeat in a standing position as in the variation.

⚠️ SAFETY TIP  Maintain trunk stability to support the lower back. Keep the pelvis level to emphasize the deep rotators and hip abductors.
**Muscles Involved**

Obturator internus, obturator externus, piri-formis, quadratus femoris, gemellus inferior, gemellus superior, posterior fibers of the gluteus minimus and medius

**Dance Focus**

As you perform this exercise, visualize the strength of the passé leg giving you the power to sail in multiple en dehors pirouettes. Turning requires a coordination of force, balance, timing, and strength. Even while performing en dedans pirouettes, you must have an excellent coordinated effort of the working leg turning out in passé and the standing leg turning out. If you lose turnout in one or the other hip, the pirouette comes to an unattractive end. This exercise reinforces the oppositional work between the passé leg turning out and the supporting leg turning out and stabilizing the body.

**VARIATION**

**Resisted Passé**

1. From a standing turned-out position while facing the barre, bring the left leg into a passé as in the illustration above. The right leg remains secure and turned out. Reemphasize deep external rotators and deep abdominal muscles for excellent posture.

2. With assistance from a friend as in the illustration on page 112, press your passé leg into the resistance of her hand while firmly maintaining turnout and stability on the standing leg. Hold for 4 counts.

3. Slowly relax and prepare to repeat. Your goal is to execute stability all the way down the chain of the supporting hip and leg as well as isolate the deep six rotators of the passé leg. Repeat 6 times.

**SAFETY TIP**  
Avoid any twisting in the knee of the supporting leg by reemphasizing the stability of the standing leg and the turnout muscles of the standing leg.
Execution

1. While lying on your back with your arms by your sides, lengthen through your spine and organize your trunk to locate your healthy neutral position. Flex the hips to 90 degrees and place a ball between the inner thighs. As you exhale, engage the lower abdominals and extend the knees so that the legs are straight and elevated off the floor, maintaining placement of the ball. Secure a position of leg height that allows your lower spine to remain in neutral.

2. Squeeze the ball within the adductors as you internally rotate and externally rotate. Repeat the hip rotations and ball squeeze for 6 sets.

3. With inhalation, bend the hips and knees to 90 degrees; relax for a moment before you reorganize. Repeat for 4 more sets.
SAFETY TIP Avoid arching the lower back; work to stay in a natural, supported pelvic position by engaging the deep abdominals.

Muscles Involved
Adductor longus, adductor brevis, adductor magnus, gracilis

Dance Focus
Bringing the legs together, crossing positions of the legs, and jumps that have leg beats in the air all require fast and firm adductors. The up phase of the plié requires a concentric contraction of the adductors, and the downward phase requires an eccentric contraction of the adductors. In the lower ranges of leg height, the inner thighs also help with hip flexion and extension. Some of the muscle fibers lie in a position to produce flexion and some lie in a position to produce hip extension. Maintaining a balance between the hip abductors and the hip adductors is another mechanism for pelvic security. You might spend a lot of time stretching the inner thighs for more flexibility, but it is just as important for you to strengthen this area as well.
Arabesque Prep

Execution

1. From a standing position with legs hip-width apart, slowly roll down until the hands are touching the floor (inverted-V position). Reorganize your trunk for balance awareness. Move your right leg into tendu derrière position.

2. As you inhale, move from tendu to arabesque, stopping the movement at 90 degrees. Hold this position for 4 counts as you exhale. On inhalation, continue to lift the leg as high as you can, focusing on the hip extensors.

3. Hold this position for 4 counts as you exhale. Return with control to tendu as you inhale. Resist gravity on the downward phase and focus on eccentric lengthening of the hip extensors. Repeat 3 times parallel and 3 times turned out on each side.

⚠️ SAFETY TIP  Maintain abdominal support to avoid uncontrollably arching the lower back.
Muscles Involved
Gluteus maximus, biceps femoris, semitendinosus, semimembranosus

Dance Focus
Arabesque can be an amazing movement to watch and execute. It requires detailed coordination of hip extension with spinal extension. In keeping with the principle of hip disassociation, remember to work the thigh against the resistance of uncontrolled lower-back arch and pelvic twisting. Once you have support from your core, hip extensors, and hip rotators, let that power support any pelvic rotation or anterior tilt as the leg goes higher. Feel the movement of arabesque being initiated by the hip extensors along with the eccentric lengthening of the abdominals to protect your spine. Your upper body must tilt forward slightly to correlate with the leg elevating. There is a graceful tug of war going on with the gluteus maximus and hamstrings lifting the thigh and the anterior structures of the core lengthening but maintaining control of your lower back. It is a beautiful example of strength, flexibility, and coordination.

Variation
Resisted Arabesque
1. Repeat the main exercise but add a resistance band to the foot of the arabesque leg. The foot of the supporting leg stands on the other end of the band.
2. The resistance band will tighten while moving from 90 degrees and upward.
3. Reemphasize lumbar control, using the hamstrings and gluteus maximus for hip extension. Repeat 3 or 4 times.
**Hip Flexor Pulse**

![Diagram of Hip Flexor Pulse]

**Execution**

1. Sit on the floor, leaning back slightly on your hands. Your left leg is extended, your right knee is bent, and that foot is on the floor. Visualize the iliopsoas deep under the abdominals, and inhale to prepare.

2. On exhalation, move into a small posterior pelvic tilt and bring the right knee to your chest in parallel. Perform 4 short pulses with the thigh, maintaining a height above 90 degrees. Focus on the iliopsoas fibers shortening to elevate your thigh. Feel both ischial sit bones equally on the floor.

3. Return to starting position with control. Maintain a slight posterior tilt. Repeat for 4 to 6 sets with emphasis on iliopsoas contraction.

**SAFETY TIP** To emphasize pelvic stability and protect the lower spine, avoid lateral tilt (hip hike) of the working leg.

**Muscles Involved**

Iliopsoas
Dance Focus

Putting power into the iliopsoas will be your secret to getting those legs up in the air. If you have flexible hamstrings combined with strength and awareness of the iliopsoas, you should be confident that your leg height will improve. The hip flexor pulse exercise is the preparation for a better développé and can be executed with a slight posterior tilt at first; then you can work into a more suitable upright posture for dance. Feel the thigh lifting as high as it can from deep under the low abdominals, and aim the thigh to your ribs. Coordinate the lifting of the right thigh with the dropping of the right ischial sit bone to stay on the floor; this will reduce the tendency of the hip to hike up a bit, which takes the work away from the iliopsoas and places it into the tensor fasciae latae and gluteal muscles. Lifting the thigh demonstrates the concentric contraction, but you can also hold the leg up for an isometric contraction to aid in increased power.

Variation

Hip Flexor Hold

1. Begin in the same starting position. Reverse the breathing pattern; this time, lift your leg to your ribs with turnout, feeling the same strong contraction of the deep iliopsoas. Inhale as the leg elevates.

2. Bring your thigh to your ribs. At the highest point, reach under your working leg with your arm to assist with lifting the thigh even higher. Hold 4 counts for an isometric contraction.

3. Release your arm but maintain the same leg height. Hold for 4 counts. Exhale and return slowly to the floor. Repeat 4 times.
**Execution**

1. Lie on your left side with the left arm overhead and your head resting on that arm. Elongate through your spine. Engage the deep abdominals along both sides of your body. Your top leg begins the exercise in high attitude à la seconde.

2. Breathing comfortably, begin to slightly turn the thigh inward for 2 counts but remain in attitude. Turn the thigh out for 2 counts. Repeat for 2 sets. Remember to separate the thigh from the pelvis. Move only the thigh, not the spine or pelvis.

3. While turning the thigh out, elevate your thigh toward your shoulder by coordinating the contraction of the deep low external rotators with the power of the iliopsoas. Continue the contraction to increase the turnout of the thigh as the leg goes higher.

**SAFETY TIP** Avoid movement of the pelvis; secure the lower spine.

**Muscles Involved**

- **Hip flexion:** Iliopsoas
- **External rotation:** Quadratus femoris
Dance Focus

If you condition your iliopsoas complex effectively, outside of what any dance technique class might offer, you can increase the height of your legs. While other muscles may be involved in this exercise, take this time to connect the deep iliopsoas and deep low rotators. Notice what happens when you turn your thigh inward—your hip hikes and the muscle contraction moves to the outside of the upper thigh. That is not the place where you want to work your développé! Let the turn-in and turnout aspect of the exercise connect you with the deep low rotators and the deep iliopsoas. Visualize how the iliopsoas complex runs from the lower segments of your spine to the lesser trochanter of your femur. Now, focus on the quadratus femoris muscle as it runs from the outside of the ischial sit bone to the posterior surface of the femur. When one pulls on the femur to lift, the other pulls on the femur to turn it out. It takes coordination, visualization, and action of both to execute an amazing développé to the side.

**Variation**

**Kneeling Attitude Lift**

1. Kneel on your left knee. Your right leg is turned out; the knee is bent and the foot is on the floor. Inhale and feel the right thigh turning out deep in the hip socket with the contraction of the low external rotator.

2. Slowly begin to lift the thigh toward your shoulder by activating the iliopsoas. Maintain a strong supporting leg. Do not continue the movement if you are unable to maintain turnout of the thigh deep inside the hip—stop, reorganize, and start over.

3. Exhale and slowly return to the floor with control. Repeat 4 times on each side. Remember to separate the stable sit bone from the lifting femur. Move only the thigh, not the spine.
Execution

1. Kneel on the right knee. Place your left foot forward on the floor with that knee bent at 90 degrees. Organize your trunk and lengthen through your spine.

2. Create strong posterior pelvic tilt with the abdominals. While lifting through the waist, focus on balance skills. The right leg is in slight hip extension.

3. Begin a long cambré to the left with the right arm overhead. Reemphasize the posterior tilt. Hold the stretch for 45 seconds, taking three long, deep breaths. Feel lengthening through the anterior hip and along the right side of your waist. Slowly return and repeat on each side 3 to 5 times.
**SAFETY TIP**  Place a pad under the right knee for cushioning. Keep the left knee at a 90-degree angle to avoid compression forces in the knee joint.

**Muscles Involved**

Iliopsoas

**Dance Focus**

Working intensely on the deep hip flexors may create unwanted tension. Your goal is to isolate the iliopsoas for lifting the legs above 90 degrees, not to create an overuse syndrome. You might need to repeatedly stretch the hip flexors while you work on strengthening the deep hip flexors. Just remember that you will receive more benefits from your stretches if your body is warmed up. Stretching the front of the hip is also beneficial for working the legs in hip extension. Remain in the posterior tilt for the entire stretch. If your pelvis begins to compensate and tilt forward, you are losing the effectiveness of the stretch. As the pelvis moves into an anterior tilt, you are actually shortening the hip flexors!