What is claimed is:

1. A transseptal insertion device which is suitable for facilitating precise and safe transseptal puncture of a cardiac interatrial septum, comprising:

a sheath that defines at least one lumen therein and has a distal end that is closest to the cardiac interatrial septum of a patient when the transseptal insertion device is in use and a proximal end that is external to the patient;

a balloon that is connected to the distal end of the sheath, wherein:

the balloon, when inflated and the transseptal insertion device is in use, overhangs and extends past the distal end of the sheath, preventing accidental puncturing of the cardiac interatrial septum and stabilizing the transseptal insertion device against fossa ovalis of the cardiac interatrial septum; and

the balloon includes one or more ultrasound transceivers that emit and receive ultrasound waves, convert the ultrasound waves to electrical signals, and transmit the electrical signals to an external imaging device that produces images of the cardiac interatrial septum from the received signals; and

a dilator that is positioned within the at least one lumen when the transseptal insertion device is in use, wherein the dilator has a distal end and is designed to and is capable of precisely puncturing the cardiac interatrial septum.

2. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are located on the balloon surface.

3. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are located inside the balloon.

4. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are oriented towards the cardiac interatrial septum when the balloon is fully inflated and the distal end of the sheath is oriented towards the cardiac interatrial septum.

5. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are oriented perpendicular to the sheath when the balloon is deflated.

6. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are configured in the shape of a cross so that one or more ultrasound transceivers are oriented towards the cardiac interatrial septum when the balloon is fully inflated and the distal end of the sheath is oriented towards the cardiac interatrial septum and perpendicular to the sheath.

7. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are configured in the shape of a disc.

8. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are connected to an external imaging device through a wire that runs via lumen in sheath.

9. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are connected to an external imaging device via WiFi or other wireless connection.

10. A transseptal insertion device which is suitable for facilitating precise and safe transseptal puncture of a cardiac interatrial septum, comprising:

a sheath that defines at least one lumen therein and has a distal end that is closest to the cardiac interatrial septum of a patient when the transseptal insertion device is in use and a proximal end that is external to the patient, wherein the sheath includes one or more ultrasound transceivers that emit and receive ultrasound waves, convert the ultrasound waves to electrical signals, and transmit the electrical signals to an external imaging device that produces images of the cardiac interatrial septum from the received signals;

a balloon that is connected to the distal end of the sheath, wherein the balloon, when inflated and the transseptal insertion device is in use, overhangs and extends past the distal end of the sheath, preventing accidental puncturing of the cardiac interatrial septum and stabilizing the transseptal insertion device against fossa ovalis of the cardiac interatrial septum; and

a dilator that is positioned within the at least one lumen when the transseptal insertion device is in use, wherein the dilator has a distal end and is designed to and is capable of precisely puncturing the cardiac interatrial septum.

11. The transseptal insertion device of claim 10 wherein the one or more ultrasound transceivers are oriented towards the distal end of the sheath.

12. The transseptal insertion device of claim 10 wherein the one or more ultrasound transceivers are oriented towards the proximal end of the sheath.