

## UNNATURAL INSTABILITY:

### All Shoe Soles Have an Extremely Dangerous But Correctable Stability Defect

#### THE DISCOVERY: BAREFEET ARE NATURALLY STABLE

**Absolutely stable**, even in the extreme rolled-out position typical of ankle sprains – the most common human injury requiring medical care. **The ankle is safely supported under a wide sole base by naturally interlocking joints and bones optimally aligned to contain the compression forces for which bone structure is designed. Opposing forces are aligned with no destabilizing torque.** The basic science of natural stability is simple.

#### THE PROBLEM: SHOES ARE ARTIFICIALLY UNSTABLE

**Grossly unstable**, particularly in the extremely tilted-out, ankle-spraining position. The shocking difference could not be greater. **The severely tilted ankle joint unsafely teeter-totters on the tiny knife-edge of the shoe sole, unnaturally held together by mere ligaments and tendons under excessive abnormal tension. Misaligned opposing forces artificially cause a powerful destabilizing torque.** The ankle's obvious instability is well-known in science and medicine, but is wrongly understood to be the flawed product of human evolution. Feet today are still shod in the same narrow cobbler design for footwear soles used for the past 2,000 years: the standing footprint. The wonderful natural stability of the barefoot ankle has remained hidden in plain sight by faulty footwear.

#### THE TERRIBLE COST OF THE SHOE'S SAFETY DEFECT

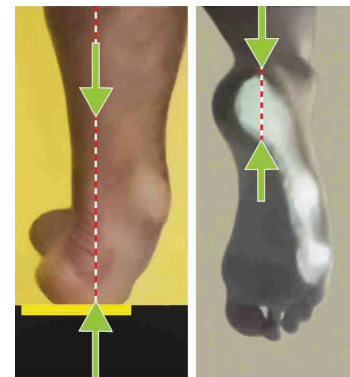
The effect of this overlooked stability defect is surprisingly catastrophic. If only half of all serious accidental falls are caused by defective footwear– likely a conservative estimate, given its gross artificial instability – then **the disastrous result every year is 20,000 deaths, 700,000 hospitalizations, 3,200,000 Emergency Room visits, and \$65 billion in medical costs in the U.S. alone**, based on CDC data.

#### THE SOLUTION: STABLE FOOTWEAR SOLES THAT COPY THE BAREFOOT SOLE

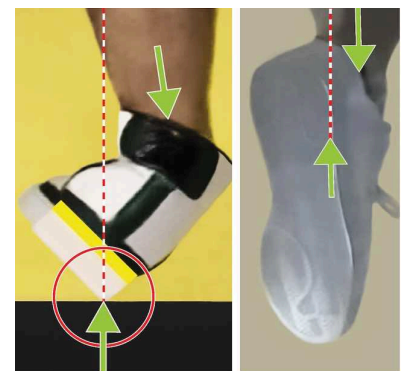
A new factory-built **corrected slide**, shown here, was designed and developed by Frampton Ellis at Anatomic Research in collaboration with industry experts. The **Frampton Ellis™ slide** provides the first physical proof demonstrating clearly that footwear with a correctly redesigned basic sole structure that copies the barefoot sole can fully restore to footwear the natural stability of the ankle when barefoot. Particularly during the extreme tilting motion that otherwise causes unnatural instability, ankle sprains and falls in shoes.

The result is something completely different: **a wide & rounded sole structure** like no other. It is in fact the first cushioned footwear sole capable of true athletic performance unlimited by gross artificial instability.

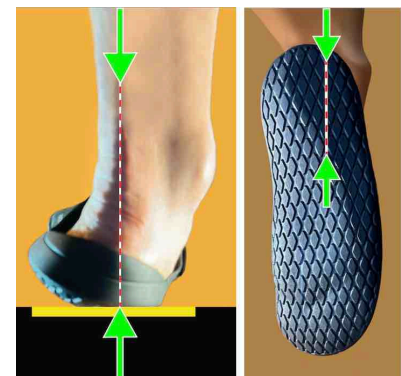
The sole was designed as a simple physical proof of concept in its most easily visible form – a slide. Nevertheless, its unadorned sole has dramatically better stability and comfort than any of today's very best athletic shoe soles for basketball, football, baseball, soccer or other professional sports. Even those worn by the most elite superstars of the **NBA, NFL, MLB or FIFA**. But all of their shoe soles can be corrected with the same simple but fundamental structural redesign.



STABLE BAREFOOT



UNSTABLE SHOE



STABLE SOLE

## **THE BASIC TECHNOLOGY TO MAKE SAFELY STABLE FOOTWEAR SOLES IS FREE**

Nearly all of this enormous hidden disaster can be prevented with the simple new footwear sole structure. It can be made using standard industry production techniques to correct the stability defect in all types of footwear. The new basic design of the sole structure is non-proprietary, open and free for limitless adaptation by all footwear companies to develop their own specific designs.

## **ANATOMIC RESEARCH WILL PROVIDE MODELS AS A PUBLIC SERVICE FOR SAFETY**

Factory-built samples of the **corrected Frampton Ellis™ slide** will be made available as a public service by Anatomic Research to footwear companies to serve as a general design prototype to copy as a basic sole structure template. They can use it to correct as quickly as possible the artificial stability defect in their footwear. Anatomic Research will provide the **Frampton Ellis™ slides** to footwear companies at its cost of developing the slides. Those companies can directly copy the slide's simple but fundamentally different basic sole structure to make safely stable all of their future footwear sole designs.

A **corrected athletic shoe** with a typical upper, insole, midsole and outsole combination is also being designed and developed by Frampton Ellis at Anatomic Research. It too will be available soon for footwear companies as a general design prototype to model the basic structure of its multi-layered sole.

Copying the basic design of these Anatomic Research prototypes will enable footwear companies to eliminate the unnatural instability defect in their footwear products over the next several years. As footwear experts, over time they should further perfect the basic initial design of the prototypes.

In the short term, Anatomic Research is also disclosing an interim design correction, a **midfoot lateral sole extension**, which is a simple add-on to sole designs of existing footwear sole designs. It provides a quick and easy fix that significantly reduces their instability.

Much more detailed information on the design and development of the **Frampton Ellis™ slide**, **athletic shoe** and **midfoot lateral sole extension** is available in a complete first draft of Frampton Ellis' new book titled, **UNNATURAL INSTABILITY**. A free digital copy will be made available to footwear companies.

## **WEARERS WILL FINALLY GET FOOTWEAR SOLES THAT ARE SAFELY STABLE**

The result of this process should be corrected shoe soles that finally restore to footwear the true natural foot and ankle stability naturally provided by the sole of the barefoot alone. They will have the major additional benefit of being noticeably **much more comfortable**. Of paramount importance, **20,000 needless deaths and \$65 billion in medical care costs will be avoided annually in the U.S. alone**.

## **FIXING THEIR DEFECTIVE SOLES WILL BE PROFITABLE FOR THE INDUSTRY**

The far better stability and comfort demonstrated by the corrected slides are so noticeable to wearers that footwear industry sales of its newly corrected shoes should increase very substantially. Most customers, especially serious athletes, will quickly come to see their unsafe old shoes as obsolete and unfashionable. The resulting sales increase should easily offset for footwear companies the relatively low cost of finally making their footwear products naturally safe for all consumers, from senior citizens to superstars. It is a definite **win-win situation** for both footwear producers and wearers.

## **MUCH MORE DETAILED INFORMATION IS AVAILABLE WITHOUT COST**

Compelling additional information on the instability defect problem and much more detail on its proposed solutions is included in the full first draft of the new book, **UNNATURAL INSTABILITY**, which is available without cost in the **Research** section of the website, [www.AnatomicResearch.com](http://www.AnatomicResearch.com).