



## COMPLIANCE MATCHING VASCULAR STENTS

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### Contact

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### Inventors

- Joel L. Berry, Ph.D.
- James E. Moore, Ph.D.

### Patents Filed

US 6,206,910 (3/37/2001)  
US 6,572,649 (6/3/2003)

### Product and Technology

Researchers at Wake Forest University Health Sciences (WFUHS) and Florida International University have developed a new paradigm in vascular stents: **stents that match the flexibility of blood vessels**. This is important because traditional, balloon-expandable and self-expandable stents cause excessive non-physiologic mechanical stress and hemodynamic shear stress at the transition between the stented and unstented region. This stress (think bending a paperclip back-and-forth) is harmful to the vessel and may have a role in thickening of the vessel wall and potentially restenosis.

These **compliance matching stents (CMS)** have been tested in a pig model with good results and have been the subject of extensive computer modeling. The CMS technology may be applied to existing bare-metal stents to improve their properties OR may be used to obtain incremental improvements to a drug-eluting stent.