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## Designer zinc-fingers

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Understanding of the DNA-binding characteristics of **zinc-finger protein** (ZFP) transcription factors has made it possible to design ZFPs to bind to specific target sequences. These **designed ZFPs** have been used effectively in cell culture experiments. In an Advanced Online Publication in **Nature Medicine**, Rebar *et al.* report the use of engineered ZFPs as tools to stimulate angiogenesis *in vivo* (*Nature Medicine*, 4 November 2002; DOI:10.1038/nm795). They designed ZFPs to regulate the gene encoding vascular endothelial growth factor-A (VEGF-A). Adenoviral delivery of the ZFPs into mice resulted in elevated VEGF-A expression that caused induction of angiogenesis and accelerated wound repair in the skin. This study demonstrates the promising possibility of using designed transcription factors for specific gene therapy approaches.

## References

1. Design and selection of novel Cys2His2 zinc finger proteins.
2. Engineering polydactyl zinc-finger transcription factors.
3. *Nature Medicine*, [<http://www.nature.com/naturemedicine>]