## Document 0297

```
Everything looked good as neurosurgeon thing: v_seem-to:e-u-h-i a_at-for-of:e-p-i x:e-h-h n:x named:x-c named:x-c named:x-c named:x-c named:x-c new distributions a with-about-of:e-e v:e-i-p p:e-i q:i-h-h n:x a a:e-u n:x p:e-u-i q:i-h-h named:x-c named:x-c p:e-u-i yofc:x-c _
   Using small electrical shocks applied to her feet , they were able to monitor sensory nerves . v:e-i-p a:e-p n:x v_to:e-i-p-i = q:i-h-h n:x pron:x = a:e-i-h v:e-i-p a:e-p n:x _
  Then , says Dr. Levy , " she woke up paralyzed . " a:e-h _ v_to:e-i-h-i n:x named:x-c _ pron:x v_up:e-i _ v:e-i-p _ _
   [20297005]
   The damage was to her motor nerves , which could n't be monitored along with the sensory nerves , he explains . q:i-h-h n_to:x-i _ p:e-u-i q:i-h-h n:x n:x _ _ neg:e-h neg:e-h _ v:e-i-p p:e-i p:e-u-i q:i-h-h a:e-p n:x _ pron:x v_to:e-i-h _
                                                                                                                                                                                                                                            (ARGI)
                                                                                                                                                                                , "galvanized me " to look for a way to prevent similar cases .

_ v:e-i-p pron:x _ x:e-h-h v_for:e-i-i _ q:i-h-h n_of:x-h _ v_from:e-i-p a_to:e-i n_of:x-i _
                         BV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and_c
   Dr. Levy 's answer may come with a new kind of magnetic brain probe , a device that he and dozens of U.S. researchers are studying with great hope n:x named:x-c _ n_to:x-i _ named_n:x-c _ n_of:x-i _ v:e-i-p _ p:e-u-i a_for:e-p _ n:x _ n:x _ q:i-h-h _ n:x _ pron:x _ x:x-i _ named_n:x-c _ n_of:x-i _ v:e-i-p _ p:e-u-i a_for:e-p _ n:x _ n:x _ q:i-h-h _ n:x _ pron:x _ x:x-i _ named_n:x-c _ n_of:x-i _ v:e-i-p _ p:e-u-i a_for:e-p _ n:x _ n:x _ q:i-h-h _ n:x _ pron:x _ x:x-i _ named_n:x-c _ n_of:x-i _ v:e-i-p _ p:e-u-i a_for:e-p _ n:x _ n:x _ q:i-h-h _ n:x _ pron:x _ x:x-i _ named_n:x-c _ n_of:x-i _ v:e-i-p _ p:e-u-i a_for:e-p _ n:x _ n:x _ q:i-h-h _ n:x _ pron:x _ x:x-i _ named_n:x-c _ n_of:x-i _ v:e-i-p _ p:e-u-i a_for:e-p _ n:x _ n:x _ q:i-h-h _ n:x _ pron:x _ x:x-i _ named_n:x-c _ n_of:x-i _ v:e-i-p _ p:e-u-i a_for:e-p _ n:x _ n:x _ q:i-h-h _ n:x _ pron:x _ x:x-i _ named_n:x-c _ n_of:x-i _ v:e-i-p _ p:e-u-i a_for:e-p _ n:x _ n
    Besides holding the promise of safer spinal surgery , the probe could improve the diagnosis of brain and nerve disorders such as strokes and multiple sclerosis p:e-u-i v:e-i-p q:i-h-h n_of:x-i a_for:e-i n:x n:x q:i-h-h n:x v_modal:e-h v_cause:e-i-p q:i-h-h n_of:x-i n:x n:x p:e-u-i p:e-u-i n:x a:e-p n:x
  The probe , which is painless , non-invasive and apparently harmless , employs strong magnetic fields to induce small whirlwinds of electricity within the brain . q:i-h-h n:x _ _ _ a:e-u _ a:e-u _ a:e-h a:e-p _ v:e-i-p a:e-p _ n-of:x-i _ x:e-h-h v:e-i-p a:e-p _ n:x _ p:e-u-i _ q:i-h-h _ n:x _ _ .
                                                                                                                                                                                                                                                                                                                                                                            (aRG2) (ARG1) (Compound)
                             ARG2 ARG1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ARG2)
                                                                                                                                             \_BV\_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BV) (ARGI)
   If positioned over the brain 's motor-control area , the hand-held electromagnets generate nerve impulses that zip down motor nerves and activate muscles , making , say , a finger twitch . x:e-h-h v:e-i-p p:e-u-i q:i-h-h n:x _ n:x _ v:e-i-p n:x _ v:e-i-p n:x _ v:e-i-p _ n:x _ v:e-i-p _
   [20297012]
   In principle , they will enable doctors to check the body 's motor system the way an electrician tests a home 's electrical circuits by running current through them a a:e-e a:e-e _ pron:x _ v:e-i-i-h n:x _ v:e-i-p q:i-h-h n:x _ n:x n=0f:x-i q:i-h-h n=0f:x-i q:i
   [20297013]
"Until now , we 've had no objective way of measuring motor function , " says Keith Chiappa , a neurologist conducting clinical tests with the devices at Boston 's Massachusetts General Hospital pre-u-i time_n:x _ pron.x _ v:e-i-i q:i-h-h a:e-p __nof:x-i __ v:e-i-p __n:x __ nxx _ __ v_to:e-i-h-i named:x-c __named:x-c __named:x-c
```





