

## Give the RASopathies Network a Treat this Halloween

Between **October 16 -31**, 2014  
text “**RARE**” to **85944** and reply **YES**  
to make a \$10 donation to advance  
RASopathies research and help this  
ladybug fly.

Your \$10 donation is tax-deductible *and* the  
EveryLife Foundation will match up to \$1,000.

Thank you so much for your support!

RASopathies Network USA is a 501c3 Nonprofit Charity ~ <http://rasopathiesnet.org>

## RASopathies

- A group of rare genetic conditions
  - Caused by mutations in genes of the Ras-MAPK pathway
  - Syndromes include:
    - Cardio-Facio-Cutaneous (CFC)
    - Costello (CS)
    - Legius
    - Neurofibromatosis type 1 (NFI)
    - Noonan (NS)
    - Noonan with Multiple Lentigines (NSML)/LEOPARD
- Syndromes share many clinical features
  - distinct facial features
  - developmental delays
  - cardiac defects
  - growth delays
  - neurologic issues
  - gastrointestinal difficulties
- Wide variance in prevalence, BUT as a group,  
RASopathies are among the most common genetic syndromes (~1:1000)