



## MICHELSON PRIZE & GRANTS IN REPRODUCTIVE BIOLOGY: The First Five Years

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Director of Scientific Research

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**Dr. Gary Michelson, MD**  
Los Angeles billionaire

supports:

- \*human heritable disease research
- \*rain forest preservation
- \*free electronic access to community college textbooks
- \*\*\*reduction of shelter euthanasia of dogs & cats

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## Found Animals Foundation

Los Angeles CA - [www.foundanimals.org](http://www.foundanimals.org)

**Established:** 2008

**Mission:** Reduce shelter euthanasia of dogs & cats

**Programs:** Michelson Prize & Grants  
 Low cost spay & neuter clinics  
 Cat adoption center  
 Adopt & shop store  
 Microchip registry  
 Pet adoption & care



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## The \$25 Million MICHELSON PRIZE IN REPRODUCTIVE BIOLOGY

**CRITERIA:**

1. Single dose nonsurgical sterilant (**injectable preferred**)
2. Effective & safe in M & F dogs & cats for 10-20 years
3. Ablates presence or action of sex steroids
4. Reasonable cost (**\$5? \$30?**) & manufacturing process
5. Suitable for administration in a field setting (**cold chain OK**)
6. Reasonable pathway to regulatory approval (**FDA-CVM**)



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## The \$50 Million MICHELSON GRANTS IN REPRODUCTIVE BIOLOGY

### CRITERIA:

1. Competitive research grants toward a nonsurgical sterilant.
2. Suggested limit of \$250,000 per year for up to 3 years.
3. Proof of concept studies *in vitro*, in rodent models, in target species (dogs and cats), in one gender or one species accepted.
4. Research animals must be placed in adoptive homes if terminal studies not essential.



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The Michelson Prize & Grants has been featured in...

Forbes

THE WALL STREET JOURNAL

Science



FOX 11  
GOOD DAY LA  
Weekdays 7-10am

AOL

Los Angeles Times

YAHOO!

everyday  
EDISONS

USA  
TODAY  
usatoday.com

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## MMPG Staff



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&amp;

The Scientific Advisory Board (=18)

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## Michelson Grants in Reproductive Biology

### BY THE NUMBERS



letters of intent received:	<b>234</b>
proposals received:	<b>83</b>
grants approved for funding:	<b>25</b>

(first grant funded in 2009;  
2 groups funded for multiple grants)

\$ committed:	<b>\$ 11,335,065</b>
\$ available:	<b>\$ 38,664,935</b>

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## Michelson Grants in Reproductive Biology BY THE NUMBERS



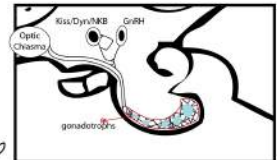
- **TARGET TISSUE**
- ablating gonadotropin releasing hormone (GnRH) (13)
- ablating pituitary gonadotrophs (3)
- ablating primordial stem cells of the gonads (9)
- **APPROACH**
- gene silencing (4)
- gene therapy (1)
- immunocontraception (7)
- targeted delivery of cytotoxins (13)

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## Hypothalamic & Anterior Pituitary Targets for Nonsurgical Sterilization

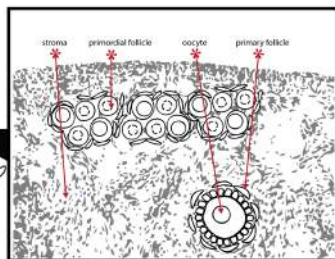
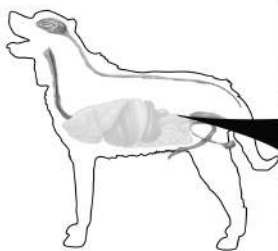


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## Ovarian Targets for Nonsurgical Sterilization

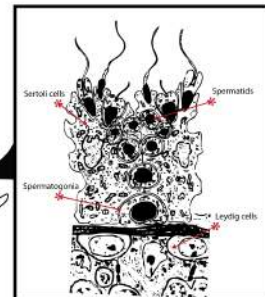
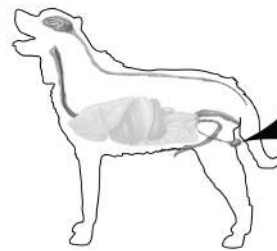


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## Testicular Targets for Nonsurgical Sterilization



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## Kinds of researchers & research we fund:

[outreach to ~10,000 scientists, 43 meeting booths, 78 ads]

- ❖ Neuroscientists:
  - ❖ Gene silencing in brain neurons
- ❖ Oncologists, Pharmaceutical Chemists:
  - ❖ Targeted delivery of cytotoxins to brain, ovaries, testes
- ❖ Immunologists:
  - ❖ Vaccination against reproductive proteins
- ❖ Virologists:
  - ❖ Gene therapy
- ❖ Molecular Biologists, Reproductive Physiologists:
  - ❖ Studies in cell culture, rodents, dogs, cats, one or both sexes

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## Grantee Institutions

### United States:

Auburn Univ, Auburn AL  
 Cornell Univ, Ithaca NY  
 Crinetics Pharmaceuticals, La Jolla CA  
 Iowa State Univ, Ames IA  
 National Jewish Health, Denver CO  
 Oregon Primate Ctr, Beaverton OR  
 Scripps Research Inst, Jupiter FL  
 Univ Arizona, Tucson AZ  
 Univ Iowa, Iowa City IA  
 Univ Pennsylvania, Philadelphia PA  
 Univ Virginia, Charlottesville VA  
 Univ Medicine & Dentistry, Pisacataway NJ  
 Vaxin Pharmaceutical, Birmingham AL  
 Wake Forest Univ, Winston-Salem NC  
 Yale, New Haven CT

### Argentina:

University of La Plata

### Australia:

University of Newcastle  
 University of Western Australia

### Netherlands:

University of Utrecht

### New Zealand:

University of Auckland

### Scotland:

Univ of Edinburg MRC Center for Reproductive Health

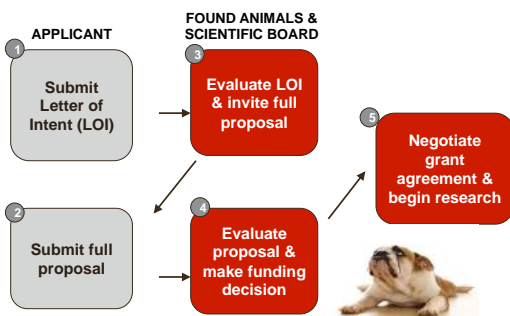
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## Grant Process Overview

<http://michelson.foundanimals.org/>

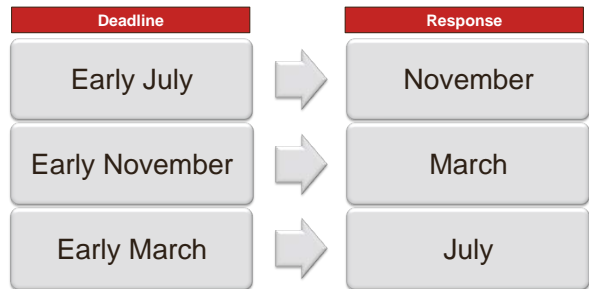


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## 3 Proposal Deadlines Per Year



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**QUESTIONS?**

[michelson.foundanimals.org/](http://michelson.foundanimals.org/)



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