ONE-ON-ONE WITH THE NIH

BIO & HEALTH
CEO & INVESTOR FORUM

3.22.19
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Sands Capital ventures
NIDDK Research: Opportunities for Partnering

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MAVA Bio & Life Sciences Partnering Forum
March 22, 2019
Arlington, VA

Twitter: @NIDDKgov
NIH Consists of 27 Institutes and Centers
NIDDK conducts and supports research on many of the most common, costly, and chronic conditions to improve health.
A Pipeline to Small Business Opportunities

Extramural Programs

- NIDDK Initiatives with Translational Implications
- NIDDK Translational Research for Therapeutic Discovery and Development Pipeline
- NIH Common Fund or Central Programs

NIH SBIR & STTR

- Discovery Phase I
- Development Phase II
- Competing Renewal Award Phase IIB
- Commercialization Phase III

Drug, 48%
Device, 18%
Diagnostic, 20%
Research Tool, 7%
Software and Health IT, 7%

NIH Common Fund or Central Programs

- Fast-Track Phase I + Phase II

- Only Some ICs Participate

NIDDK Translational Research for Therapeutic Discovery and Development Pipeline

- NIDDK Initiatives with Translational Implications
- NIDDK Translational Research for Therapeutic Discovery and Development Pipeline
- NIH Common Fund or Central Programs

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How can one work with Intramural Researchers at NIDDK?

One-way interactions:
- Licenses

Two-way interactions:
- Research Collaboration Agreements
- Clinical Trial Agreements
- Cooperative Research and Development Agreements

No “mixing” of funds rule easier to control
Finding collaborators?

- Publications and presentations
- NIDDK website
- NIH OTT website
The Problem: Kidney diseases impose a significant public health burden.

The Opportunity: Recent advances in technologies to interrogate human kidney tissues have set the stage for precision medicine in nephrology, which will enable the right treatment to reach the right AKI or CKD patient at the right time.

The Response: The NIDDK is supporting the Kidney Precision Medicine Project (KPMP) to improve histologic, anatomic, and molecular assessment of human kidney biopsies.

Companion SBIR and STTR funding opportunities
Opportunity Pool for partnerships
Kidney Tissue Atlas for health and disease that will help identify new therapeutic targets

https://kpmp.org/
Integration of Technologies into an Artificial Pancreas System (APS)

- Development of integrated artificial intelligence systems (In Control) to mimic the function of the pancreas for the treatment of diabetes.

- NIDDK supported academic (University of Virginia) and SBIR grants (TypeZero) for its development.

- Fully integrated bionic pancreas (i-Let)

- NIDDK has supported academic (Boston University) and SBIR grants (BetaBionics) for its development.
Sharklet Technologies developed a urinary catheter whose design is based on the denticles on sharkskin that resist biofouling

- Serial participant in NIH's Commercialization Accelerator Program
- Reported multiple licensing deals, including one with Cook Medical
- Successful in raising subsequent follow-on funding
- Received several $MM in R&D grants
- Ultimately acquired by an equity medical device firm
Intrinsic LifeSciences (ILS), the BioIron Company™, through awards from multiple scientific divisions of the NIDDK, developed assays for key iron-regulating hormones including Hepcidin and Erythroferrone, for diagnosis of genetic and acquired iron disorders including congenital anemias, hemochromatosis, and inflammatory diseases in which iron homeostasis is dysregulated.

- Products inspired by basic science research conducted by NIDDK R01 grantees
- Multiple RUO assays available for purchase
- CAP/CLIA accreditation for clinical diagnostic laboratory (IntrinsicDx)
Extramural Clinical Trial Networks
- Academic clinical sites with expertise, staff, and access to patients
- Partnerships testing drugs, devices, diagnostics
- Contact NIDDK Staff: https://www.niddk.nih.gov/research-funding/research-programs

Repositories of Clinical Trial Samples & Data
- NIH-funded trials require deposit of samples & data for dissemination
- Sample & Data sharing for acceptable study proposals
- NIDDK Repository Requests: https://repository.niddk.nih.gov/home/

Intramural Scientists with Specialized Laboratories, Know-How, or IP
- Cooperative Research & Co-Development of New Technologies
- Contact Intramural Investigators: https://irp.nih.gov/
It doesn’t have to be complicated

....as long as you make right connections and build strong relationships.....
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