Research Development Core

(RDC)

Directors:

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Research Development Core (RDC)

(1) Provides access to the USC-Buck NSC

Resource Cores (RCs) in support of new research initiatives.

(2) Primarily focused on junior faculty and investigators new to the aging field, especially from institutions that lack aging programs.

Employs two primary mechanisms to achieve this goal:

(1) Provides support for pilot projects to address proof-of-concept and feasibility analyses, develop innovative models for geroscience research, and to advance novel uses for pre-existing technologies currently within the USC-Buck NSC RCs and across existing USC-Buck facilities.

(2) Implements a voucher program providing discounted or free access to cutting-edge technologies available at USC and
the Buck within the RCs.

Applications funded in year 1

Last Name	First Name	Internal/Externa	Institution	Title	Pilot/Voucher	Amount Requested	NSC-Core
January 2021 Applications							
Soukas	Alexander	External	MGH	Sgk3 associations with aging-related metabolic phenotypes	Pilot	$ 12,000.00	USC-GTASC
Turner	Christian	Internal	USC	Neuropeptide profiling of SKN-1gf mutants	Voucher	$ 7,500.00	Buck-GTC (Garrison)
Li	Jingjing	External	UCSF	Construct a deep convolutional neural network to computationally assi	Pilot	$ 20,000.00	Buck-GTC (Zhou)
Winer	Dan	Internal	Buck	The effects of mechanical tension on cell senescence and its secretory	Pilot	$ 16,998.00	Buck-CSBC
Moore	Darcie	External	Wisconsin-Madi	Uncovering the role of intermediate filaments in stress and aging using	Pilot	$ 20,000.00	Buck-GTC (Garrison)
Chanfreau	Guillaume	External	UCLA	Splicing factor PRPF8 and degenerative disease phenotypes	Pilot	$ 12,000.00	USC-GTASC
Lithgow	Gordon	Internal	Buck	Analysis of polymorphisms in candidate human kinases for association	Pilot	$ 12,000.00	USC-GTASC
Stuhr/Curran	Nicole/Sean	Internal	USC	Mass spec profiling of bacterial diets fed to C. elegans (6 microbial extr	Voucher	$ 7,200.00	Buck-CSBC
Kapahi	Pankaj	Internal	Buck	Single-cell sequencing of the mouse brain on a diet that lowers advanc	Pilot	$ 20,000.00	Buck-GTC (Kapahi/Furman)
Vinceguerra/Nha	Manlio/James	Internal	USC/ICRS-visitir	Compound Screening in C. elegans for improved healthspan	Voucher	$ 8,450.00	USC-GTC (Curran)
Dang	Weiwei	External	Baylor	Genetic association with Alzheimer disease and neurological outcome	Pilot	$ 12,000.00	USC-GTASC
Clayton	Zachary	External	Colorado-Boulde	Using chip cytometry-based digital spatial profiling to elucidate novel m	Pilot	$ 15,000.00	Buck-GTC (Melov)
Preapproved from proposal submission							
Benayoun	Berenice	Internal	USC	Characterizing the transposon-induced secretome in human fibroblasts	Voucher	$ 9,600.00	Buck-CSBC
Villa/Curran	Osvaldo/Sean	Internal	USC	Defining Aldh4a1 variants in muscle health of normal adult aging	Voucher	$ 4,078.00	USC-GTASC
Newman	John	Internal	Buck	HMGCS2 in Human Metabolism and Health	Pilot	$ 12,000.00	USC-GTASC