

File No. 191261

Committee Item No. 11

Board Item No. 29

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Budget & Finance Committee

Date January 15, 2020

Board of Supervisors Meeting

Date January 28, 2020

Cmte Board

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| <input type="checkbox"/> | <input type="checkbox"/> | Motion |
| <input type="checkbox"/> | <input type="checkbox"/> | Resolution |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | <input type="checkbox"/> | Legislative Digest |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Budget and Legislative Analyst Report |
| <input type="checkbox"/> | <input type="checkbox"/> | Youth Commission Report |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Introduction Form |
| <input type="checkbox"/> | <input type="checkbox"/> | Department/Agency Cover Letter and/or Report |
| <input type="checkbox"/> | <input type="checkbox"/> | MOU |
| <input type="checkbox"/> | <input type="checkbox"/> | Grant Information Form |
| <input type="checkbox"/> | <input type="checkbox"/> | Grant Budget |
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| <input type="checkbox"/> | <input type="checkbox"/> | Contract/Agreement |
| <input type="checkbox"/> | <input type="checkbox"/> | Form 126 – Ethics Commission |
| <input type="checkbox"/> | <input type="checkbox"/> | Award Letter |
| <input type="checkbox"/> | <input type="checkbox"/> | Application |
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OTHER (Use back side if additional space is needed)

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Completed by: Linda Wong Date January 10, 2020
 Completed by: Linda Wong Date January 17, 2020

[Appropriation - General Reserve - City College of San Francisco Operating Support - \$2,700,000 - FY2019-2020]

Ordinance appropriating \$2,700,000 of the General Reserve to support City College of San Francisco class reinstatement, upon condition of an executed agreement for this use in FY2019-2020.

Note: **Unchanged Code text and uncodified text** are in plain Arial font.
Additions to Codes are in *single-underline italics Times New Roman font*.
Deletions to Codes are in *strikethrough italics Times New Roman font*.
Board amendment additions are in double-underlined Arial font.
Board amendment deletions are in ~~strikethrough Arial font~~.
Asterisks (**)** indicate the omission of unchanged Code subsections or parts of tables.

Be it ordained by the People of the City and County of San Francisco:

Section 1. The sources of funding outlined below are herein appropriated to reflect the funding available in Fiscal Year 2019-2020.

1 **Sources Appropriation**

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Fund /	Project &	Account	Description	Amount
Department ID	Activity/			
	Authority			
10020 / 230018	10023237 - 0001 /	598040	Designated For	\$2,700,000
GF Continuing	17064	Designated For	General Reserve	
Authority Ctrl /	General Reserve /	General Reserve		
GEN General City	General Reserve			
Total Sources				\$2,700,000

Section 2. The uses of funding outlined below are herein appropriated and reflect the projected uses of funding to support for City College of San Francisco.

1 **Uses Appropriation**

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Fund / Department ID	Project & Activity/ Authority	Account	Description	Amount
10020 /229218 /	10031182 – 0001 / City College Enrollment Assistance Fund / 19805 - City College Enrollment Assistance Fund	538000 – CBO Services Budget	Funding for class reinstatement at City College of San Francisco	\$2,700,000
TOTAL USES				<u><u>\$2,700,000</u></u>

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17 Section 3. This appropriation is conditioned on the City and City College of San

18 Francisco executing an written agreement to (1) use the funds for class reinstatement,

19 (2) submit a report to the Board of Supervisors by ~~June 30~~March 15, 2020 documenting

20 the reinstated classes and associated enrollment numbers, and (3) return any funds not

21 used for class reinstatement or preparation of the associated report by ~~August 30~~June

22 30, 2020.

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24

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FILE NO.

ORDINANCE NO.


RO#20014
SA#23-14

1 Section 4. The Controller is authorized to record transfers between funds and adjust the
2 accounting treatment of sources and uses appropriated in this Ordinance as necessary
3 to conform with Generally Accepted Accounting Principles and other laws.

4 APPROVED AS TO FORM:
5 DENNIS J. HERRERA, City Attorney

FUNDS AVAILABLE:
BEN ROSENFELD, Controller

6
7 By: 
8 JANA CLARK
Deputy City Attorney

By: 
BEN ROSENFELD
Controller

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<p>Item 11 File 19-1261</p>	<p>Department: Department of Children, Youth and their Families (DCYF)</p>
<p>EXECUTIVE SUMMARY</p>	
<p style="text-align: center;">Legislative Objectives</p> <ul style="list-style-type: none"> • The proposed ordinance appropriates \$2,700,000 of the General Reserve to support the reinstatement of Spring 2020 classes at City College of San Francisco. The ordinance requires that the transfer of funds be subject to an agreement between the City (through the Department of Children, Youth, and Their Families) and City College that includes requirements to (1) use the funds for class reinstatement, (2) submit a report to the Board of Supervisors by June 30, 2020 documenting the reinstated classes and associated enrollment numbers, and (3) return any funds not used for class reinstatement or preparation of the associated report by August 30, 2020. <p style="text-align: center;">Key Points</p> <ul style="list-style-type: none"> • City College of San Francisco is a public community college in San Francisco. According to a November 21, 2019 official statement from the City College of San Francisco’s Office of the Chancellor, City College removed approximately 225 credit sections and 63 non-credit sections from the Spring 2020 schedule, as well as reduced the summer class schedule by 25 percent, in an effort to curtail a projected \$13 million budget deficit for the 2019-2020 fiscal year. <p style="text-align: center;">Fiscal Impact</p> <ul style="list-style-type: none"> • The proposed ordinance would appropriate \$2,700,000 of the General Reserve to the City College of San Francisco (through the Department of Children, Youth, and Their Families). According to the FY 2018-19 Comprehensive Financial Annual Financial Statement, there was \$130.9 million in the City’s General Reserve available for appropriation as of June 30, 2019 <p style="text-align: center;">Recommendation</p> <ul style="list-style-type: none"> • Approval of the proposed ordinance is a policy matter for the Board of Supervisors. 	

MANDATE STATEMENT

City Charter Section 2.105 states that all legislative acts shall be by ordinance, approved by a majority of the members of the Board of Supervisors.

BACKGROUND

City College of San Francisco is a public community college in San Francisco. According to a November 21, 2019 official statement from the City College of San Francisco’s Office of the Chancellor, City College removed approximately 225 credit sections and 63 non-credit sections from the Spring 2020 schedule, as well as reduced the summer class schedule by 25 percent, in an effort to curtail a projected \$13 million budget deficit for the 2019-2020 fiscal year. Credit and non-credit subject areas impacted by the cuts include art, dance, music and offerings for older adults.

DETAILS OF PROPOSED LEGISLATION

The proposed ordinance appropriates \$2,700,000 of the General Reserve to support the reinstatement of Spring 2020 classes at City College of San Francisco. The ordinance requires that the transfer of funds be subject to an agreement between the City (through the Department of Children, Youth, and Their Families) and City College that includes requirements to (1) use the funds for class reinstatement, (2) submit a report to the Board of Supervisors by June 30, 2020 documenting the reinstated classes and associated enrollment numbers, and (3) return any funds not used for class reinstatement or preparation of the associated report by August 30, 2020.

FISCAL IMPACT

Table 1 below summarizes the proposed appropriation of \$2,700,000.

Table 1: Appropriation of \$2,700,000 to City College of San Francisco

Sources	
General Reserve	\$2,700,000
Total Sources	\$2,700,000
Uses	
<u>Appropriation</u>	
Department of Children, Youth and their Families – City College Enrollment Assistance Fund	\$2,700,000
Total Uses	\$2,700,000

According to the FY 2018-19 Comprehensive Financial Annual Financial Statement, there was \$130.9 million in the City’s General Reserve available for appropriation as of June 30, 2019.¹

¹ The General Reserve is intended to address revenue weaknesses, expenditure overages, or other programmatic goals not anticipated during the annual budget process. City Administrative Code Section 10.60(b) provides for the

RECOMMENDATION

Approval of the proposed ordinance is a policy matter for the Board of Supervisors.

General Reserve to be no less than 2.5 percent of budgeted regular General Fund revenues in FY 2018-19, increasing to 2.75 percent of budgeted regular General Fund revenues in FY 2019-20.

SAN FRANCISCO BOARD OF SUPERVISORS

BUDGET AND LEGISLATIVE ANALYST

Print Form

Introduction Form

By a Member of the Board of Supervisors or Mayor

RECEIVED
BOARD OF SUPERVISORS
SAN FRANCISCO
Time stamp
2019 DEC 10 PM 4:16
of meeting date

I hereby submit the following item for introduction (select only one):

- 1. For reference to Committee. (An Ordinance, Resolution, Motion or Charter Amendment).
- 2. Request for next printed agenda Without Reference to Committee.
- 3. Request for hearing on a subject matter at Committee.
- 4. Request for letter beginning : "Supervisor [] inquiries"
- 5. City Attorney Request.
- 6. Call File No. [] from Committee.
- 7. Budget Analyst request (attached written motion).
- 8. Substitute Legislation File No. []
- 9. Reactivate File No. []
- 10. Topic submitted for Mayoral Appearance before the BOS on []

Please check the appropriate boxes. The proposed legislation should be forwarded to the following:

- Small Business Commission
- Youth Commission
- Ethics Commission
- Planning Commission
- Building Inspection Commission

Note: For the Imperative Agenda (a resolution not on the printed agenda), use the Imperative Form.

Sponsor(s):

Walton, Mar, Haney, Feuer

Subject:

Appropriation - General Reserve of \$2,700,000 for City College of San Francisco operating support - FY 2019-2020

The text is listed:

Ordinance appropriating \$2,700,000 of the General Reserve to support City College of San Francisco class reinstatement upon condition of an executed agreement for this use.

Signature of Sponsoring Supervisor: [Signature]

For Clerk's Use Only

Wong, Linda (BOS)

From: pmonette-shaw <pmonette-shaw@earthlink.net>
Sent: Monday, January 13, 2020 5:13 PM
To: Fewer, Sandra (BOS); Mandelman, Rafael (BOS); Walton, Shamann (BOS)
Cc: Yee, Norman (BOS); Stefani, Catherine (BOS); Peskin, Aaron (BOS); Mar, Gordon (BOS); Brown, Vallie (BOS); Haney, Matt (BOS); Ronen, Hillary; Safai, Ahsha (BOS); Calvillo, Angela (BOS); Yu, Angelina (BOS); Fregosi, Ian (BOS); Boilard, Chelsea (BOS); Herzstein, Daniel (BOS); Bennett, Samuel (BOS); Mullan, Andrew (BOS); Falzon, Frankie (BOS); Angulo, Sunny (BOS); Hepner, Lee (BOS); Yan, Calvin (BOS); Quan, Daisy (BOS); Wong, Alan (BOS); Wright, Edward (BOS); Huang, Jenny (BOS); RivamonteMesa, Abigail (BOS); Mcdonald, Courtney (BOS); Mahogany, Honey (BOS); Zou, Han (BOS); Low, Jen (BOS); Maybaum, Erica (BOS); Lee, Ivy (BOS); Vejby, Caitlin (BOS); Smeallie, Kyle (BOS); Temprano, Tom (BOS); Mundy, Erin (BOS); Adkins, Joe (BOS); Goossen, Carolyn (BOS); Monge, Paul (BOS); Beinart, Amy (BOS); Li-D9, Jennifer (BOS); Burch, Percy (BOS); Gallardo, Tracy (BOS); Gee, Natalie (BOS); Evans, Abe (BOS); Sandoval, Suhagey (BOS); Ho, Tim (BOS); Chinchilla, Monica (BOS); Wong, Linda (BOS)
Subject: Written Testimony: January 15 Budget and Finance Committee Agenda Item #11: General Reserve Appropriation — CCSF Operating Support – \$2,700,000 – FY2019-2020]
Attachments: Testimony to Budget and Finance Committee 20-01-12.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Patrick Monette-Shaw

975 Sutter Street, Apt. 6
 San Francisco, CA 94109
 Phone: (415) 292-6969 • e-mail: pmonette-shaw@earthlink.net

January 12, 2020

Budget and Finance Committee, San Francisco Board of Supervisors
 The Honorable Sandra Lee Fewer, Chairperson
 The Honorable Shamann Walton, Supervisor, District 10

The Honorable Rafael Mandelman, Supervisor, District 8
 1 Dr. Carlton B. Goodlett Place
 San Francisco, CA 94102

Re: **January 15 Agenda Item #11: General Reserve Appropriation — CCSF Operating Support – \$2,700,000 – FY2019-2020]**

Dear Chairperson Fewer and Budget and Finance Committee Members,

I strongly urge the Budget and Finance Committee to approve item 11 on Wednesday’s agenda to authorize \$2.7 million from General Fund Reserves be appropriated to support the reinstatement of nearly 300 Spring 2020 classes at City College of San Francisco.

CCSF needs to remain just that: A city College, not a junior college offering only classes for credit towards four-year degrees.

It is completely unethical to raid the Dignity Fund to restore only 17 of the 50-plus older adults courses eliminated from CCSF's Older Adults Division (OLAD).

Please vote to support the Budget and Finance Committee passage of the \$2.7 million budget supplemental — and send it along with a strong recommendation to approve the appropriation — to the full Board of Supervisors.

Respectfully submitted,

Patrick Monette-Shaw

Columnist

cc: The Honorable Catherine Stefani, Supervisor, District 2
The Honorable Aaron Peskin, Supervisor, District 3
The Honorable Gordon Mar, Supervisor, District 4
The Honorable Dean Preston, Supervisor, District 5
The Honorable Matt Haney, Supervisor, District 6
The Honorable Norman Yee, Supervisor, District 7
The Honorable Hillary Ronen, Supervisor, District 9
The Honorable Ahsha Safai, Supervisor, District 11
Linda Wong, Clerk, Budget and Finance Committee

Patrick Monette-Shaw

975 Sutter Street, Apt. 6
San Francisco, CA 94109

Phone: (415) 292-6969 • e-mail: pmonette-shaw@earthlink.net

January 12, 2020

Budget and Finance Committee, San Francisco Board of Supervisors

The Honorable Sandra Lee Fewer, Chairperson

The Honorable Shamann Walton, Supervisor, District 10

The Honorable Rafael Mandelman, Supervisor, District 8

1 Dr. Carlton B. Goodlett Place

San Francisco, CA 94102

Re: **January 15 Agenda Item #11: General Reserve Appropriation —
CCSF Operating Support – \$2,700,000 – FY2019-2020**

Dear Chairperson Fewer and Budget and Finance Committee Members,

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Please vote to support the Budget and Finance Committee passage of the \$2.7 million budget supplemental — and send it along with a strong recommendation to approve the appropriation — to the full Board of Supervisors.

Respectfully submitted,

Patrick Monette-Shaw

Columnist

cc: The Honorable Catherine Stefani, Supervisor, District 2
The Honorable Aaron Peskin, Supervisor, District 3
The Honorable Gordon Mar, Supervisor, District 4
The Honorable Dean Preston, Supervisor, District 5
The Honorable Matt Haney, Supervisor, District 6
The Honorable Norman Yee, Supervisor, District 7
The Honorable Hillary Ronen, Supervisor, District 9
The Honorable Ahsha Safai, Supervisor, District 11
Linda Wong, Clerk, Budget and Finance Committee

Wong, Linda (BOS)

From: Christine Hanson <chrissibhanson@gmail.com>
Sent: Wednesday, January 15, 2020 12:24 AM
To: Wong, Linda (BOS); Mandelman, Rafael (BOS); Fewer, Sandra (BOS); Walton, Shamann (BOS)
Subject: Item 11 General Reserve - City College of San Francisco Operating Support

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Committee Members Walton, Mandelman, and Fewer

Thank you for considering item 11.

City College needs the Supervisors to push the pause button on the Chancellor's policies before he pummels the class schedule completely beyond resuscitation. It makes no sense that his cancelling of nearly 300 classes was a planned restructuring. The outcome of his planning without consulting the people who have been working hard to meet the needs of the students AND bring money in to the College shows how far off his solitary plan has been.

For example: the Biology department has had to turn away 500 students this semester who were on waiting lists for classes. Two of the classes cancelled in this so called long range planning were Biology 9 classes that fulfill science requirements for transfer.

This is the first week of classes at City College but tonight it did not look like it. The hallways at school were empty. Please, please, forward this to the full Board of Supervisors.

Thank you for your help.

Christine Hanson

Wong, Linda (BOS)

From: Margaret Reiter <margaret.reiter123@gmail.com>
Sent: Wednesday, January 15, 2020 1:09 PM
To: Wong, Linda (BOS)
Subject: Documents to include in record from today's hearing
Attachments: 6.10.19-Master-Plan-for-Aging-EO.pdf; Is There a Medical Cure for Loneliness.docx

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Item # 11: 2 documents to include in record for today's hearing.
See attached.
If you have any questions, please let me know.
Margaret Reiter

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

Executive Order N-14-19

WHEREAS, the State of California values older Californians and is committed to building an age-friendly state so that all Californians can age with dignity and independence; and

WHEREAS, California's over-65 population is projected to grow to 8.6 million by 2030, an increase of four million older Californians;

WHEREAS, the composition of older adults will change as they are more ethnically diverse and more likely to be single or childless, live alone, work longer, have lower incomes and have less retirement savings;

WHEREAS, all older adults, and those with disabilities, should be able to choose to remain in their communities as they age, and whereas meaningful choice requires access to a broad range of public and private programs, resources, and supports, including health, homecare, food and nutrition, human services, housing and transportation; and

WHEREAS, older Californians contribute to the health and strength of our communities by raising and mentoring younger generations of Californians; and

WHEREAS, direct care workers and family caregivers, who may struggle to balance work and caregiving, provide essential care for older adults and those with disabilities, and demand for this care is growing; and

WHEREAS, shifts in California's population over the next decade will present new and different demands on state and local services across all functions of government, as well as on families and on older Californians; and

WHEREAS, these population shifts will introduce new opportunities for economic and community growth while driving increased health and long-term care costs; and

WHEREAS, California has long been a leader in supporting a wide range of home of community based services, including the In-Home Supportive Services Program, Community Based Adult Services, Multipurpose Senior Services Program and the Regional Center system, to support seniors and persons with disabilities living independently; and

WHEREAS, California is the home of many innovators and has tremendous opportunities to design and promote healthy aging policies for older Californians of all income levels, including patient-centered care, healthy lifestyles and communities, and prevention of exploitation and abuse; and

WHEREAS, policies that promote healthy aging require actively engaging with older adults as contributors to the social, economic, and civic fabric of our communities, encouraging physical and psychological health and well-being in older adults and their caregivers; and

WHEREAS, the demographic shift will create the need for policy and other changes, and a recognition that local communities and private sector have a critical role in preparing for future demographic changes by building capacity to support an aging population.

WHEREAS, any policy recommendations should build on California's work supporting people with disabilities living independently and reflect the principle of "Nothing About Us Without Us."

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, by virtue of the power and authority vested in me by the Constitution and statutes of the State of California, do hereby issue this order to become effective immediately.

IT IS HEREBY ORDERED that the health and well-being of older Californians be a priority of the State of California.

IT IS FURTHER ORDERED that by October 1, 2020 a Master Plan for Aging be developed and issued to serve as a blueprint for state government, local government, private sector and philanthropy to implement strategies and partnerships that promote healthy aging and prepare the state for the coming demographic changes.

IT IS FURTHER ORDERED that the Secretary of the California Health and Human Services Agency convene a Cabinet-level Workgroup for Aging to advise the Secretary in developing and issuing a Master Plan for Aging.

IT IS FURTHER ORDERED that the Master Plan for Aging include key data indicators, with 10-year targets, to support the implementation of the Master Plan.

IT IS FURTHER ORDERED that the Master Plan for Aging include recommendations to better coordinate federal, state, and local government programs and services to serve the needs of older adults, and their families and caregivers.

IT IS FURTHER ORDERED that the California Health and Human Services Agency, in consultation with other state agencies, convene a Master Plan for Aging Stakeholder Advisory Committee, which would include a Research Subcommittee and a Long-Term Care Subcommittee representing a broad array of Californians with an interest in building an age-friendly California, such as older Californians, adults with disabilities, local government, healthcare providers, health plans, employers, community-based organizations, foundations, academic researchers and organized labor, to provide advice and input to the Administration on the development of the Master Plan.

IT IS FURTHER ORDERED that the Long-Term Care Subcommittee report to the Governor by March 2020 on, but not limited to the following:

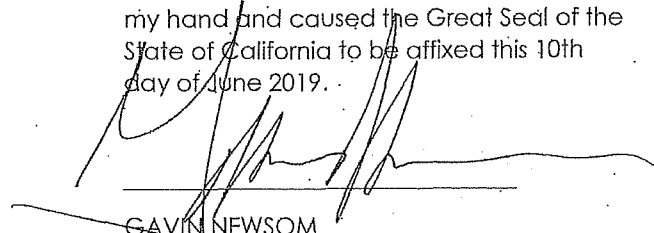
1. The growth and sustainability of state long-term care programs and infrastructure, including In-Home Supportive Services.
2. An examination of access to long-term care, financing for long-term care services and the quality of long-term care provided in a variety of settings.
3. An examination of the impact of program instability and other factors on labor supply and retention of the workforce providing long-term care services and supports.
4. Recommendations to stabilize long-term care services, including IHSS, as a foundation for implementing the Master Plan.

IT IS FURTHER ORDERED that agencies under my direct executive authority cooperate in the implementation of this Order, and it is requested that entities of State government not under my direct executive authority assist in its implementation as necessary.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order shall be filed with the Office of the Secretary of State and that widespread publicity and notice shall be given to this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its departments, agencies, or other entities, its officers or employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 10th day of June 2019.



GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

Is There a Medical Cure for Loneliness?

With older Americans at higher risk for social isolation, science may have a treatment

by Lynn Darling, AARP, December 11, 2019



[AARP December 2019/January 2020 AARP Magazine
December 2019/January 2020 aarp.org/magazine]

| Genomics Researcher Steve Cole had never really thought much about loneliness and the pain it causes until he looked into a molecular microscope at a small sample of white blood cells. What he saw there changed his life.

The sample was one of several that had been taken from a handful of very lonely men and women, and Cole's observations were startling: In each of the samples, the blood cells appeared to be in a state of high alert, responding the way they would to a bacterial infection. It was as though the subjects were under mortal assault by a disease — the disease of loneliness.

But even more surprising to Cole, a professor of medicine, psychiatry and biobehavioral sciences at the UCLA School of Medicine, was the public reaction to the subsequent study he coauthored, when it was published in 2007.

"The impact at the societal level — it really kind of shocked me," he says. As an academic, he was "used to publishing findings that interest scientists but not the general public." Now he was receiving a steady stream of emails from ordinary people telling him how grateful they were for the work he was doing, and sharing stories of loved ones whose lives had been devoured by loneliness. "So that led me to respect loneliness as a topic and a foe," Cole adds. "And that really did set me on a kind of different journey than I had been on at the time."

Many of the women and men studying loneliness express a similar sense of mission about their research. Loneliness, says Louise Hawkley, a senior research scientist at the University of Chicago, "is a universal human experience, and being the social animals that we are, there must be implications when those social connections are not satisfied." There is a human need to be embedded, connected, integrated in a social network, she notes. When that social network is missing, "the consequences are very real in terms of mental and physical health."

The true cost of loneliness

According to a study by researchers at the AARP Public Policy Institute and at Stanford and Harvard universities, the impacts of people living in social isolation add almost \$7 billion a year to the cost of Medicare, mostly because of longer hospital stays — a result, researchers hypothesize, of not having community support at home.

"Studies continue to show that the negative health effects of loneliness and isolation are especially harmful for older adults," says Lisa Marsh Ryerson, president of AARP Foundation. "Moreover, our own research has found that people with lower income are often at greater risk of isolation.."

The research into those impacts has produced a wave of headlines. Every day it seems scientists discover more ways in which loneliness can attack our bodies and shorten our lives. Loneliness is a killer — an array of studies have found that it leaves us more likely to die from heart disease and is a contributing factor in other fatal conditions. It makes us more vulnerable to Alzheimer's disease, high blood pressure, suicide, even the common cold. It's more dangerous to our health, researchers tell us, than obesity, and it's the equivalent of smoking 15 cigarettes a day.

Fighting social isolation

Connect2Affect is AARP Foundation's long-term effort to end isolation and build the social connections older adults need to thrive. Connect2Affect.org features tools and resources to help individuals evaluate their isolation risk, reach out to others who may be feeling lonely and disengaged, and find practical ways to reconnect to the community.

The Research is alarming, but for most of us, it is also confusing. How do scientists take a ubiquitous, enduring and universal feeling and turn it into a set of scary statistics? How can an abstract emotion shorten a life? How do we even define a word that provokes so many meanings in so many different circumstances?

Most of us are intimately familiar with only one kind of loneliness: our own. For the men and women studying it, however, loneliness is a multiheaded mystery, a shape-shifter whose appearance changes in every mirror held up to it. Some experts find its face in statistics; others, in brain scans. Still others see it in the behavioral patterns of the people who suffer from it.

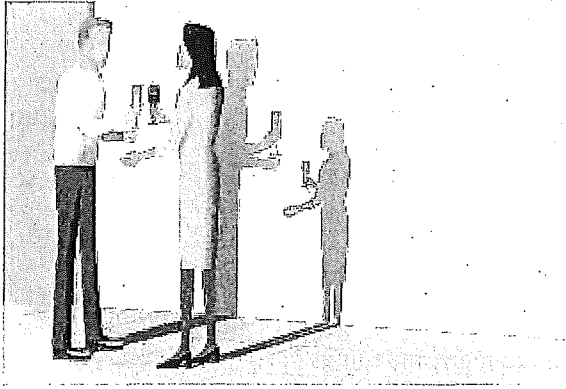
Together, those in the field deploy a complex battery of methods. Researchers have infected volunteers with cold viruses, have measured the physical distance that married lonely people maintain from their loved ones, have deprived college students of their sleep and have hurt the feelings of subjects playing games against a computer. Scientists have studied body language and eye movements, have built sophisticated statistical structures and have tracked their subjects over years to determine which ones die younger, get sicker, contract dementia and suffer depression. And yet the attempt to take the measure of such an essentially amorphous concept can be something like drawing a map to a country that can be seen only in the dark.

What does it mean to be lonely?

Many of the alarming statistics about loneliness come from studies that don't look solely at the way it feels but also examine clues to its presence provided by other, more quantifiable, factors — physical isolation, marital status, the number of close friends and family members, and the amount of television being watched.

"We need to define what exactly the issue is," says Julianne Holt-Lunstad, a professor of psychology and neuroscience at Brigham Young University. "Is it loneliness specifically, or is it people becoming more socially disconnected in a variety of ways?" Until recently, she adds, data on loneliness in and of itself was scarce. "But there are other kinds of indicators that are routinely collected that would suggest we are becoming less socially connected. We have evidence from census data that there has been an increase in the number of people who are living alone, and there are declining marriage rates and increasing rates of childlessness. We know that lacking social connection puts us at greater health risk."

Loneliness carries a stigma that hampers efforts to help sufferers. It implies that one is a social failure.



MAKOTO FUNATSU

Holt-Lunstad acknowledges that people who live alone aren't necessarily lonely and that there are many who may be nested within a close-knit family and still feel disconnected. Yet a subjective feeling of loneliness, she says, is not the only way to measure a person's vulnerability to health risks. Objective factors, such as living arrangements, may be equally important. Simply living alone or in an isolated place may be just as harmful to your health as feeling lonely.

Holt-Lunstad is the coauthor of an often-cited landmark study that looked at three groups of people who might be seen as lacking sufficient social connection: those who were socially isolated from other people, those who described themselves as very lonely and those who lived alone. The study pooled the evidence collected from 70 studies that followed a total of 3.4 million participants for an average of seven years and came up with a startling conclusion. Each of these groups faced roughly the same increased risk of an early death—32 percent for those living alone, 29 percent for those who were socially isolated from others and 26 percent for those who described themselves as very lonely.

The study found that it didn't matter whether the participants were healthy at the time of the study. "People say all the time, 'Is it that being lonely makes you unhealthy, or is it because you're unhealthy that you withdraw from others or they withdraw from you?'" Holt-Lunstad notes. "Certainly, physical and mental health issues can put you at risk for loneliness and isolation, but the evidence we have is independent of health status. Whether or not you are healthy, those who are more socially connected live longer."

Conclusions like Holt-Lunstad's are drawn by analyzing dozens of longitudinal studies — elegantly designed research projects that follow groups of individuals over long periods and track the development of, or changes in, the subject under study. Such analyses help to determine, for instance, whether loneliness can lead to dementia or is the result of it, by tracking which condition appeared first.

But whether scientists are examining loneliness through a statistical lens, under a microscope or via behavioral studies, they need a more quantifiable definition of their subject than the ones found in sad songs or advice columns. Researchers require a way to measure loneliness, to distinguish between the feelings summoned by a failed romance or strange faces in an unfamiliar city and those that reflect a chronic, intractable longing for a connection that isn't there.

"That's one of the first issues we run into when scientists talk about loneliness," Hawkley says. "At what point do you say that somebody's lonely?" A teenage boy alone on a Saturday night experiences a very different kind of loneliness than does an elderly man who lives in a bare apartment and hasn't spoken to anyone for days.

Because loneliness can mean different things to different people, Hawkley says, scientists need to measure the condition in a "more finely grained fashion, a continuum on which one can define an individual as being slightly, moderately or extremely lonely."

That continuum is found in the UCLA Loneliness Scale, the gold standard for defining loneliness for research purposes. There are now several shortened versions of the scale, but the original is a 20-item questionnaire that asks about feelings associated with loneliness but never inquires about loneliness per se. The questions include statements such as, "I am unhappy doing so many things alone," and "There is no one I can turn to." The way in which the questions are worded, and the choice of answers, means that those who are fleetingly lonely or perfectly content in their solitude will end up with scores at the low end of the scale, whereas the chronically lonely, at whom much of the research is aimed, will have scores putting them at the top.

How being lonely affects your brain

Not all scientists are studying loneliness as a complex matrix of contributing factors. A growing number are focusing on the feeling itself, the intensely personal experience of rejection, disconnection and longing that some researchers believe produces a pain as real as any caused by a physical injury, one that has little to do with living arrangements or social networks.

These researchers are looking at loneliness as the nexus where molecular biology and psychology intersect, creating an intricate dance in which body and mind take their cues from each other and produce a highly personal, private and prolonged kind of hell. Research along these lines stems from very basic questions: What's the point of loneliness? What purpose could it possibly serve?

Well, for one thing, it protects us from saber-toothed cats.

Our earliest ancestors were sociable creatures — they had to be. Those on their own were vulnerable to attack, easy pickings for hungry predators. According to this evolutionary model, loneliness may have evolved as a kind of early-warning system, a signal that something isn't right, which prompted us to get back to the safety of the group and put the body in a stressful state of high alert until we did so.

The sense of threat that would accompany such a feeling found its way deep into our cellular makeup — inflammation like what geneticist Steve Cole found in the blood cells of the lonely people he studied. On a temporary basis, inflammation is a good thing; it's the body's first system of defense, helping to combat an infection or repair a wound. But what works as a short-term response can be deadly when it's ongoing. Inflammation amps up biological processes leading to tissue breakdown and impairment of the immune system, which, in turn, increases our susceptibility to conditions ranging from heart disease to Alzheimer's.

"We think that human psychology interprets loneliness as a kind of threat, and that this kind of inflammatory response is a biological reflex that gets triggered whenever we experience threat or uncertainty," Cole explains.

Could the end of loneliness be found at the drugstore? It's become clear that the pain of loneliness is real. If that's the case, could the pain be treated?

Inflammation then sets up a vicious cycle. "When you feel lonely, your brain activates inflammation in the white blood cells," he says. "Well, one of the weird things we've discovered is that inflammation talks back to the brain and changes the way it works." What appears to happen? "After loneliness stimulates that white blood cell-inflammatory response, the response feeds back to the brain and makes it irritable, suspicious, prone to negative emotions and fearful of meeting new people and making new friends."

Those negative emotions set up an intricate loop of psychological responses, says Stephanie Cacioppo, director of the Brain Dynamics Laboratory at the University of Chicago Pritzker School of Medicine. What's happening, she observes, amounts to a kind of duel between body and brain. The body, responding to millions of years of evolutionary conditioning, wants to be with other people, but the modern, lonely brain, under the influence of the inflammatory response and heightened levels of stress, senses a threat in its encounters with others and chooses to isolate us further.

"Your body has a different survival mode than your brain has," notes Cacioppo. "While the body has a long-term self-preservation mode and wants to approach others to survive, the lonely brain has a short-term self-defense mode and sees, erroneously, more foes than friends." In the lonely state, "the brain is misreading social signals that it should read normally; suddenly it doesn't have the correct translation. You put someone who is lonely into a room alone and every person who comes there will be perceived as a threat." Lonely people, she continues, often misread a facial expression or tone of voice — characterizing curiosity as hostility, for instance — and gradually develop a distorted reality about the social world around them. That unconscious sense of threat can lead to an endless behavioral cycle in which a lonely person, in a mistaken attempt at self-protection, sends out signals of disinterest or even hostility, which then causes others to withdraw.

Those who are lonely live at such a heightened level of alarm that they lose sleep. Their brains also respond with greater alarm to words such as "reject" and "bully" than they do to other negative words, like "vomit." And in one of the lab's recent behavioral studies, married lonely people stood farther away from loved ones, reflecting their preference for greater interpersonal distance.

The search for a loneliness "cure"

Answering the question of what strategies might ease the loneliness crisis is one of the biggest challenges researchers in the field now face. "Because there is no single cause, loneliness might require very different approaches," Holt-Lunstad says. She compares the challenge to the one posed by obesity, a condition that also springs from multiple sources, including nutrition, genetics and family environment.

And, like obesity, she observes, loneliness carries a stigma that hampers efforts to help those who suffer from it. It's another reason why she prefers to talk about social connection rather than loneliness when confronting the problem.

"It helps to remove some of the stigma. Because loneliness implies in some way that one is a social failure," she says. "But if we talk about social connection, that's something that applies to all of us and that we all have to work on. It's not necessarily pointing the finger at any one individual or group. It's a continuum, and every one of us is on that continuum." In fact, Holt-Lunstad would like the relative health of our social connections to be considered in the same terms as other elements of a healthy lifestyle, such as diet and exercise.

Research on ways to help lonely people has been decidedly mixed, the experts say. One of the most effective methods seems to be cognitive behavioral therapy (CBT), which can help a lonely individual better understand how his or her assumptions and behavior might be working against the desire to connect with others. The late neuroscientist John Cacioppo — who was married to and worked with Stephanie Cacioppo — and his colleagues engaged soldiers returning from Iraq and Afghanistan in a series of "social fitness exercises"; they taught the soldiers, for example, to look up from their cellphones and talk with the people around them.

CBT usually takes place one-on-one in a professional's office. However, such a highly personalized form of help may be impractical when it comes to treating the growing ranks of the lonely. At the same time, more-easily achieved approaches, such as encouraging lonely people to find one another at the local senior center, can backfire. "Putting lonely people together to make friends doesn't work, for two reasons," Cacioppo says. "First, loneliness increases self-centeredness. And second, loneliness makes people more irritable and defensive. If you put two lonely people together, they're going to hate each other after two minutes."

That's in part because the lonely can't get what they need simply from the mere presence of other people; what they crave is "core values and shared life experiences," she adds. "We all need a witness to our lives and people to look after. Our survival and well-being depend on our collective well-being, not our individual might. Which is why something like volunteering — helping others — really helps."

Rural communities may be one laboratory in which to explore solutions that meet the need for human contact and the kind of intimacy that makes that contact meaningful. The state of Maine, for example, with its scattered aging population, is at the forefront of an approach that relies on community outreach to identify the lonely and keep them connected. "We're proud of the inclination of folks in Maine to watch out and care for their local communities," says Lenard Kaye, director of the Center on Aging at the University of Maine. "These are your friends and neighbors looking out for you. It's the meter reader and the postal carrier and your hairdresser all keeping an eye out for their fellow man or woman."



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Could the end of loneliness eventually be found at the local drugstore? That loneliness causes pain comes as no surprise to its sufferers, but it has become increasingly clear to medical professionals that the pain is real, notes UCLA professor of psychology Naomi Eisenberger. If that's the case, could the pain be treated?

In one experiment, Eisenberger monitored the brain activity of volunteers while they played an online computer game, tossing a ball to other "players" that were, in fact, computers. When the computers stopped tossing the ball to a volunteer, Eisenberger found increased activity in the regions of the brain involved with physical pain. The more rejected the volunteer players felt, the more "social pain" their brains registered. The brains of the subjects who took acetaminophen (Tylenol) before the game, though, showed less activity in the pain centers.

Eisenberger is now planning to study whether reducing the body's inflammatory response might in turn ratchet down the loneliness one feels. Participants in the study will be given a standard dose of naproxen (Aleve), a common over-the-counter anti-inflammatory drug, for four weeks, during which researchers will test their levels of loneliness.

"Maybe Aleve can break that feedback loop where loneliness can heighten inflammation and inflammation can heighten loneliness, and seems to increase our sensitivity to negative social experiences," Eisenberger says. "If we give people Aleve and maybe it helps to reduce the inflammation, maybe it will change how people see the social world — so instead of interpreting every little comment as something negative, maybe slowly, over time, people will feel a bit less disconnected from others, a bit less lonely."

The hope is that people wouldn't have to take naproxen forever, she adds. "They could take it short term, break this loop and then go out in the world and be less likely to interpret the social environment in negative ways."

Research suggests that some antidepressants — those classified as selective serotonin reuptake inhibitors, or SSRIs — may help reduce the sense of social threat that underlies long-term loneliness. Cacioppo's team is testing a neuroactive steroid derived from progesterone. But not "as a magic cure for

loneliness," she says. "It's to help silence the mind that sees threat everywhere, so therapy can work with a malleable and open mind."

"The consequences of isolation and loneliness are severe: negative health outcomes, higher health care costs and even death," said Senator Susan Collins (R-Maine), chairman of the Senate Special Committee on Aging, at a hearing in 2017. "Just as we did when we made a national commitment to cut smoking rates in this country," Collins went on, "we should explore approaches to reducing isolation and loneliness."

"Loneliness," Cacioppo observes, "is the discrepancy between what you want from your relationships and what you actually have." For those on the front lines of loneliness research, the upsurge in public awareness and interest is the most hopeful sign that this distance can be bridged.

