
RESEARCH & SCHOLARSHIP

FISCAL YEAR 2020



ANNUAL REPORT

SENIOR VICE PROVOST
FOR RESEARCH &
GRADUATE EDUCATION

CORINNE LENGSFELD



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a year in review

WHERE WE ARE NOW

August 15, 2020

It is fair to say that most of us did not see what Fiscal Year 2020 had in store for the world and for the University of Denver.

In March, due to concerns around the Coronavirus, the University quickly switched to online learning and temporarily shut down much of our research, scholarship and creative work. This sparked incredible initiative by our faculty and staff. Some conducted research, like Schyluer van Enberg on vaccines or Kimberly Chiew and Peter Soko-Hessner on epidemiological data to examine how people feel, think and behave under stress. Some created products to help in this pandemic, like Alex Huffman, working with facilities to calculate aerosols and case rates in Lamont singing and instrument classes; the Innovation Lab, manufacturing face shields; and KIHA, making hand sanitizer. So many more contributed to the health and well-being of our campus. Please read more about their work in this report.

Through all this, the University, and our faculty, staff, and students still thrived. Again this year, DU's research and scholarship saw unprecedented growth. Our research expenditures increased 13% over FY 2019, topping \$41 million. Our dedicated and passionate DU faculty received 135 new awards totaling more than \$34 million. Thirty-two principal investigators had more than \$300,000 in research expenditures, including Robin Leake of GSSW who topped \$3 million! There were three new large grants over \$3 million.

Distance did not hold our students back this year from incredible contributions to research and scholarship. DU hosted the annual Research & Scholarship Showcase online via Twitter (a first for the University!), where 75 undergraduate and 14 graduate students participated. DU also awarded 183 doctoral degrees, 1,991 masters degrees, 35 undergraduate summer research grants, and 25 Undergraduate Partners in Scholarship (PINS) grants.

Throughout this fiscal year, our leadership never wavered as Dr. Kimberly Bender successfully led DU's research enterprise as interim associate vice



provost for research. Kim has done an outstanding job in this role, displaying impressive leadership throughout her tenure, but especially during the Coronavirus shut down and the subsequent resumption of research, scholarship and creative work on campus. Kim engaged with faculty to facilitate cross-division collaboration, as well as to spark new collaborations within and between unlikely units. This is most dramatically apparent in the successful launch of the Knowledge Bridge program. Thank you, Kim!

Each year I say that I am proud of the accomplishments of our faculty, staff, and students. But this year, it's more than that. I am deeply touched by how we all came together to support one another, to make tough decisions and sacrifices for the benefit of the University, to be creative and thoughtful in a time of uncertainty, and so much more. You, as always, remain the reason we constantly push the limits, raise the bar, and serve the public good. Thank you.

A handwritten signature in blue ink, appearing to read 'Corinne Lengsfeld'. The signature is fluid and stylized.

Corinne Lengsfeld
Senior Vice Provost for
Research & Graduate Education

RESEARCH OVERVIEW

FY 2020 was yet another record-breaking year for research expenditures at the University of Denver.

\$41.4M

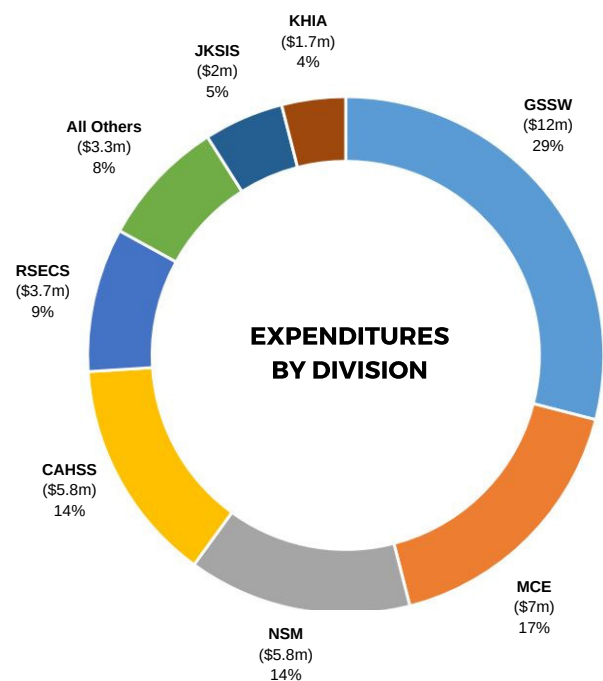
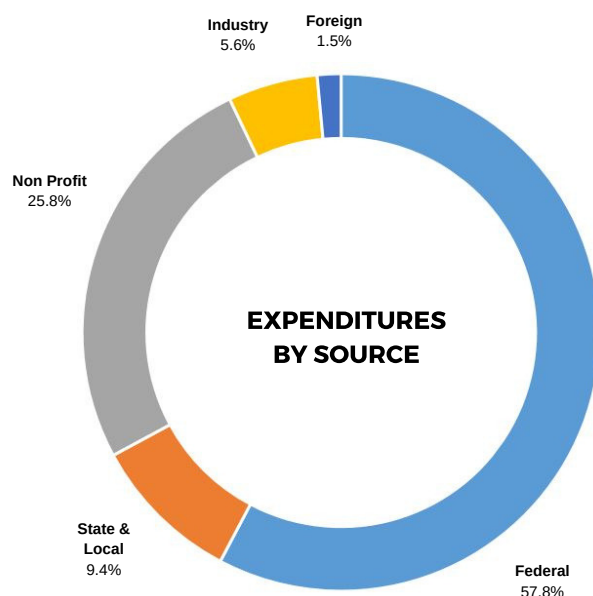
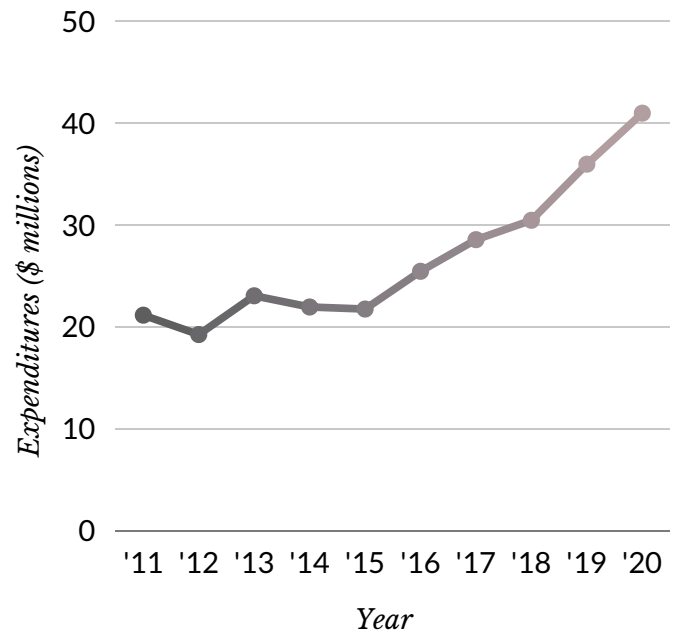
RESEARCH EXPENDITURES

In FY 2020 research expenditures increased 13% over FY 2019, topping \$41 million. Over the past 10 years, expenditures have increased 93%.

\$1.3M

FACILITIES & ADMINISTRATION COSTS

Total indirect costs paid back to divisions in FY 2020.



Note: Others includes Barton (4%), GSPP (1%), SCOL (1%), XITE (1%), and Various (<1%).

NEW GRANT AWARDS

Even with the disruption of COVID-19, DU's Principal Investigators did not let it deter them from securing new grant funding.

135

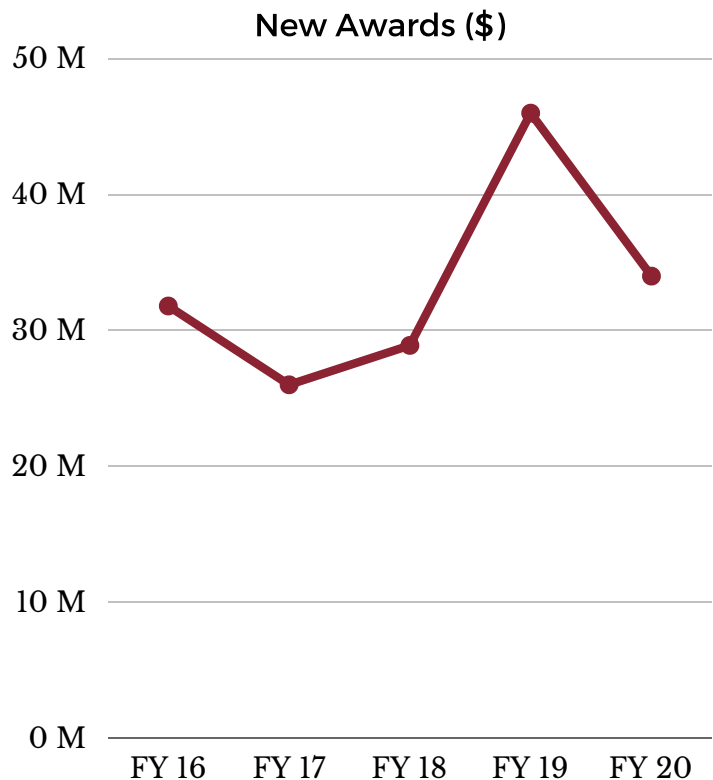
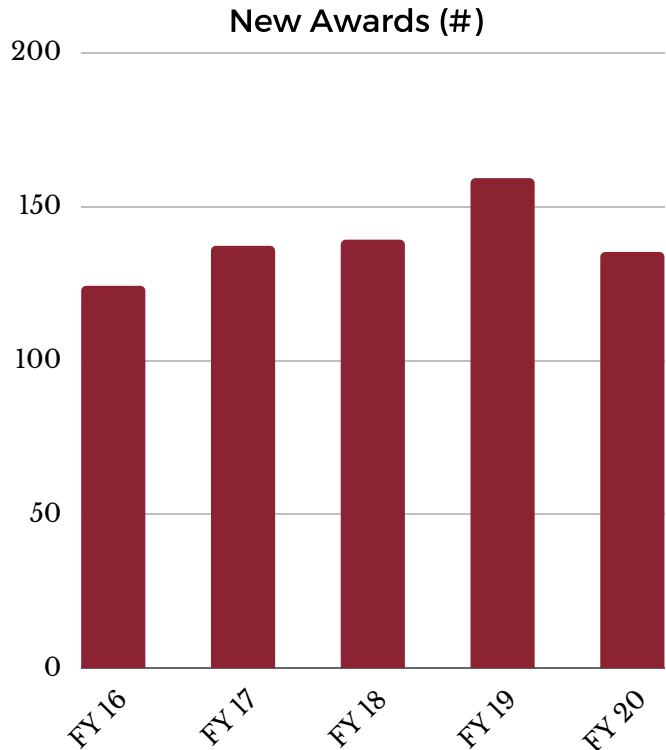
NEW GRANT AGREEMENTS

Of the 135 new grant agreements awarded in FY 20, eight were funded at more than \$1 million.

\$34M

NEW AWARD FUNDING

DU received \$34 million in new award funding, a 7% increase over the past five years.



CAMPAIGNS & INITIATIVES

USNWR CAMPAIGN



GOAL & STRATEGY

Raise awareness and perception of the University of Denver's research prowess and thought leadership—to improve scoring in USNWR's annual expert opinion survey over the next 1-3 years. Utilizing a multi-channel marketing campaign, combining targeted email communications with robust paid, earned and owned media touchpoints.



EMAIL CAMPAIGN

- ~1,000 recipients
- 52% open rate
- 14% click-through rate
- 6 total unsubscribes
- 95 unique website landing pages created
- 2:00 avg. time on page



PAID ADVERTISING

- LinkedIn – 1,063 clicks; 174k impressions; 0.61% click-through rate
- YouTube – 879 clicks; 125k impressions; 0.70% click-through rate
- Display ads – 44k clicks; 5.4M impressions; 0.81% click-through rate
- Gmail ads – 183k clicks; 232k impressions; 78.80% click-through rate



OWNED CONTENT

- RadioEd podcast – 2,241 listens; 41 states, 22 countries
- Video series – 6 new videos + research and innovation playlist; 27k total views



EARNED MEDIA

- 81 national media mentions
- 184 local media mentions



RESULTS

- High click-through rates
- Increased engagement through emails and Google ads
- Quality of 2020 media placements + 4.5%

PUBLIC IMPACT FELLOWS



PURPOSE

In FY 2019, in collaboration with Marketing & Communications and the Office of the Provost, DU created the Public Impact Fellows program. This program was designed to increase faculty reach and impact of the University's faculty thought leaders.



2019 PIFS

- | | |
|-----------------------------|----------------------------|
| • Jeanne Abrams, ULIB | • Jacob Hyde, GSPP |
| • Apryl Alexander, GSPP | • Julia McDonald, JKIS |
| • Yoli Anyon, GSSW | • Shannon Murphy, NSM |
| • Kimberly Bender, GSSW | • Angela Narayan, CAHSS |
| • Elizabeth Campbell, CAHSS | • Sarah Pessin, CAHSS |
| • Anne DePrince, CAHSS | • Galena Rhoades, CAHSS |
| • Stacey Freedenthal, GSSW | • Shannon Silva, GSSW |
| • Jennifer Greenfield, GSSW | • Leanne ten Brinke, CAHSS |
| • Eric Holt, DCB | • Karen Xie, DCB |



2020 PIFS

- | | |
|-----------------------|--------------------------|
| • Melissa Akaka, DCB | • Daniel Brisson, GSSW |
| • Erin Anderson, MCE | • César Cuauhtémoc |
| • Deborah Avant, JKIS | • García Hernández, SCOL |
| • Katy Barrs, GSPP | • Eric Chess, KIHA |
| • Marie Berry, JKIS | • Brian Gearity, GSPP |
| • Ali Besharat, DCB | • Rebecca Galemba, JKIS |



MEDIA MENTIONS

- 2020: 88 total mentions in elite, national, and local media (66% increase over FY 2019)
- 2019: 53 total mentions in elite, national, and local media



MEDIA PUBLICATIONS

- 2020: 19 op-eds; 10 published in elite/national outlets (including *The New York Times* & *TIME*)
- 2019: 14 Op-Eds; 6 published in national/elite outlets (including CNN & *The Washington Post*)



MOST MEDIA HITS

- 2019: Jennifer Greenfield, GSSW
- 2020: Apryl Alexander, GSPP

FACULTY REPORT



**244 PRINCIPAL
INVESTIGATORS**

funded for FY 2020

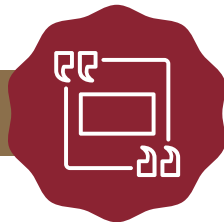
**23 PRINCIPAL
INVESTIGATORS**

with \$300k + in research expenditures



**401 FACULTY
AUTHORS**

**25,124 FACULTY
CITATIONS**



**807 ARCHIVAL
PUBLICATIONS**

**25,124 MEDIA
CITATIONS**



TOP PRINCIPAL INVESTIGATORS

*BASED ON FY20
EXPENDITURES*

\$3,000,000 +

Robin Leake, GSSW/Butler

\$1,000,000 +

Elaine Belansky, MCE

Douglas Clements &

Julie Sarama, MCE

Nancy Lucero, GSSW/Butler

Galena Rhoades, CAHSS

Barton-CEAL

Jonathan Moyer, JKSI

Margaret Franko, GSSW/Butler

Ann-Charlotte

Granholm-Bentley, KIHA

Suzanne Kerns, GSSW

Phillip Strain, MCE

Paul Rullkoetter, RSECS

Elysia Davis, CAHSS

\$500,000 +

Michele Hanna, GSSW

Kevin Shelburne, RSECS

Pilyoung Kim, CAHSS

Carole Wilcox, GSSW/Butler

Mark Siemens, NSM

Kevin Morris, GSSW

\$300,000 +

Gareth Eaton &

Sandra Eaton, NSM

John Latham, NSM

Cedric Asensio, NSM

James Blankenship &

Dina Loerke, NSM

Lena Lundgren, GSSW

Amin Khodaei, RSECS

Lauren McGrath, CAHSS

Schuyler Van Engelenburg, NSM

Lynn Clark, Project XITE

Donald New, ARTI

Cullen Hendrix, JKSI

CAREER AWARD SUPPLEMENT

*NATIONAL SCIENCE
FOUNDATION*

Robin Tinghitella

Associate Professor, NSM
\$153,052

EARLY INVESTIGATOR AWARD

*INSTITUTE OF
EDUCATION SCIENCES*

Garrett Roberts

Assistant Professor, MCE
\$499,310

FULBRIGHT SCHOLARS

Toni Linder

Professor Emerita, Education

Timothy Sisk

Professor, JKISIS

HIGHLY-CITED PAPERS

Paul Horn, NSM

Volume Doubling, Poincare
Inequality and Gaussian Heat
Kernel Estimate for Non-
Negatively Curved Graphs

Cullen Hendrix, JKISIS

Climate As a Risk Factor
for Armed Conflict

Jesse Owen, MCE

Computer-Assisted Cognitive-
Behavior Therapy for Depression:
A Systematic Review and Meta-
Analysis

Erica Larson, NSM

Insights From Genomes Into the
Evolutionary Importance and
Prevalence of Hybridization in
Nature

FACULTY- AUTHORED BOOKS

Rashida Banerjee, MCE

Assessment: Recommended Practices
for Young Children and Families

Jessica Bartley, GSPP

What You Need to Know
About Eating Disorders

Christopher Brown, ULIB

Mastering United States
Government Information:
Sources and Services

Lucy Cane, CAHSS

Sheldon Wolin and Democracy:
Seeing Through Loss

Mark Engberg, MCE

Expanding Inquiry on Intercultural
Wonderment to Optimize
Study Abroad Learning Contexts

Graham Foust, CAHSS

Fifty Crudities

Brian Gearity, GSPP

Coach Education and Development in
Sport: Instructional Strategies; &
Understanding Strength and
Conditioning as Sport Coaching:
Bridging the Biophysical, Pedagogical
and Sociocultural Foundations of
Practice

Lawrence Golan, CAHSS

Score Study Passes

Norma Hafenstein, MCE

Perspectives in Gifted Education:
Legal Issues

Robert Hardaway, SCOL

Saving the Electoral College

Steven Hartley, DCB

Marketing

W. Scott Howard, CAHSS

Archive and Artifact: Susan Howe's
Factual Telepathy

Micheline Ishay, JKISIS

The Levant Express: Arab Uprisings,
Human Rights and the
Future of the Middle East

Barbara Jackson, DCB

Construction Management Jump Start

Mark Levine, DCB

Handbook of Real Estate Exchanges
Handbook on Real Estate Exchange
International Real Estate
Real Estate Securities

Mark Levine & Libbi Levine Segev, DCB

Real Estate Transactions:
Tax Planning and Consequences

Sarah Morelli, CAHSS

A Guru's Journey: Pandit Chitresh and
Indian Classical
Dance in Diaspora

**Erika Polson & Lynn Schofield Clark,
CAHSS**

The Routledge Companion to Media
and Class

Carl Raschke, CAHSS

Neoliberalism and Political Theology:
From Kant to Identity Politics

Chip Reichardt, CAHSS

Quasi-Experimentation

Jack Sheinbaum, CAHSS

Good Music: What
It Is and Who Gets to Decide

Paul Sutton, NSM

Ecosystem Services Valuation of
Mesoamerica and the
Caribbean

Philip Tedeschi, GSSW

Transforming Trauma: Resilience and
Healing Through our
Connection with Animals

Aleysia Whitmore, CAHSS

World Music and the Black Atlantic

Suisheng (Sam) Zhao, JKISIS

China's New Global Strategy: The Belt
and Road Initiative (BRI) and Asian
Infrastructure Investment Bank (AIIB)

GRANTED PATENTS

MOBILE SELF-LEVELING LANDING PLATFORM FOR SMALL-SCALE UAVS

United States Patent *United States Patent*
10,618,675 10,538,339

DU Inventors:

Kimon Valavanis, Professor, Electrical & Computer Engineering, & **Matthew Rutherford**, Associate Professor, Computer Science, Ritchie School of Engineering and Computer Science

FULL CYCLE RAPID SCAN EPR AND DECONVOLUTION

United States Patent
10,578,703

DU Inventors:

Mark Tseytlin, Senior Research Scientist (previous), Department of Chemistry and Biochemistry, College of Natural Sciences and Mathematics

MOBILE SELF-LEVELING LANDING PLATFORM FOR SMALL-SCALE UAVS

United States Patent
10,538,339

DU Inventors:

Kimon Valavanis, Professor, Electrical & Computer Engineering, & **Matthew Rutherford**, Associate Professor, Computer Science, Ritchie School of Engineering and Computer Science

CROSSED-LOOP RESONATORS

United States Patent
10,502,797

DU Inventors:

George Rinard, Senior Research Engineer; Department of Department of Mechanical and Materials Engineering, Ritchie School of Engineering and Computer Science

Gareth Eaton, Professor, Department of Chemistry and Biochemistry; College of Natural Sciences and Mathematics

MOTOR TASK DETECTION USING ELECTROPHYSIOLOGICAL SIGNALS

United States Patent
10,588,534

DU Inventor:

Mohammad H. Mahoor, Professor; Department of Electrical & Computer Engineering; Ritchie School of Engineering and Computer Science

IMAGE PROCESSING FOR POSE ESTIMATION

United States Patent
10,540,782

DU Inventors:

Kimon Valavanis, Professor, Electrical & Computer Engineering, & **Matthew Rutherford**, Associate Professor, Computer Science, Ritchie School of Engineering and Computer Science

EPR METHODS AND SYSTEMS

United States Patent
10,509,091

DU Inventors:

Mark Tseitlin, Senior Research Scientist (previous); **Gareth Eaton**, Professor; & **Sandra Eaton**, Professor, Department of Chemistry and Biochemistry, College of Natural Sciences and Mathematics

George Rinard, Senior Research Engineer, Department of Department of Mechanical and Materials Engineering, Ritchie School of Engineering and Computer Science

MOBILE SELF-LEVELING LANDING PLATFORM FOR SMALL-SCALE UAVS

United States Patent
10,343,794

DU Inventors:

Kimon Valavanis, Professor, Electrical & Computer Engineering, & **Matthew Rutherford**, Associate Professor, Computer Science, Ritchie School of Engineering and Computer Science

FACULTY & COVID-19

During the COVID-19 pandemic, our faculty took initiative in their respective areas to, once again, contribute to the public good. This list is not complete; however, that does not diminish the value and meaning of all the incredible work, time & energy devoted to the cause.

VACCINE RESEARCH

Van Engelenburg Lab, NSM

Creating synthetic versions of SARS-CoV-2 virus, which could enable a way to manufacture effective diagnostics & a vaccine.

COVID-19 AT DU MODEL

Julia Dmitrieva, CAHSS

This model predicts the impact of various public health measures and epidemiologic conditions on the rates of infection and fatalities on campus throughout Fall quarter.

COVID CONTACT TRACING

Andrew Urbaczewski & Young-Jin Lee, DCB

Published in the *European Journal of Information Systems*, this [paper](#) explores the benefits and drawbacks of government surveillance within the COVID-19 outbreak of 2020.

PPE PRODUCTION

The Innovation Labs, RSECS

Production of personal protective equipment (PPE), such as face shields, protective barriers, face mask dispensers, and dispensers for disinfection supplies for classrooms & other spaces on campus.

HAND SANITIZER PRODUCTION

KIHA

Manufactured and donated 60% alcohol hand sanitizer to six nursing homes and home care facilities, & an Emergency Room.

BEHAVIORAL RESEARCH

Kimberly Chiew & Peter Sokol-Hessner, CAHSS

Collecting behavioral & epidemiological data from a nation-wide sample to examine how people feel, think, & behave under the sustained stress of the pandemic.

ESTIMATING AIRBORNE INFECTION RATES

Alex Huffman, NSM; Facilities Management & Planning; & Lamont School of Music

Using a mathematical model & a small network of air sensors to estimate the probability of airborne infection within individual classrooms to improve preventative efforts before students return; and released publicly available [database](#) of selected COVID-19 resources for community outreach.

SPIT LAB

Phil Danielson, NSM; Sarah Watamura, CAHSS; Matthew Rutherford, RSECS; Corinne Lengsfeld, Provost's Office

New facility to contribute to low cost, mass, rapid COVID-19 testing using salivary collection and limited resource consumption.

MENTAL HEALTH & WELL-BEING

The Mental Health & Well-Being Collaborative (The Collaborative)

Assisted people accessing DU's clinic resources on campus, developed a website to centralize information about DU's mental health clinics to provide guidance on which clinic on campus is best suited given the patient's needs, and hosted mental health resources for BIPOC communities gathered by the Collaborative.

ROUNDTABLE DISCUSSION ON COVID-19 PANDEMIC

Daniels College of Business

Hosted a Voices of Experience miniseries where three prominent C-suite executives discussed how COVID-19 has affected their industries and challenged them as leaders.

FAIR ALLOCATION OF SCARCE MEDICAL RESOURCES

Govind Persad, SCOL

This [article](#) argues that governments and policy makers must do all they can to prevent the scarcity of medical resources and provides six recommendations to be used to develop guidelines that can be applied fairly and consistently across cases.

CAMPUS SURVEY ON FALL RETURN TO CAMPUS

Renee Botta, CAHSS

Composed and executed a survey to nearly 3,500 DU faculty, staff and students about returning to campus amid the COVID-19 pandemic.

AWARD ABSTRACTS

LARGE GRANTS/CONTRACTS



UNIVERSITY of
DENVER

ELAINE BELANSKY & BENJAMIN INGRAM, MCE



Make It Happen
Colorado Health Foundation, \$4.95m

The Make it Happen grant is intended to support 27 rural school districts located in the San Luis Valley and Southeastern Colorado in the implementation of aspects of their comprehensive health and wellness plans that pertain to physical activity, nutrition, health education, and staff wellness. Specifically, this grant will provide monetary and professional development resources to support school districts in implementing best practices and collecting program evaluation data.

DOUGLAS CLEMENTS & JULIE SARAMA, MCE



Learning Trajectories as a Complete Early Mathematics Intervention: Achieving Efficacies of Economies at Scale
National Science Foundation, \$4.5m

Early proficiency in mathematics is a powerful predictor of long-term academic success. This proposal is an Impact Study in the Teaching Strand focused on mathematics intervention geared toward kindergarten students. Using a web-based tool (Learning Trajectories [LT]2), this project seeks to study the [LT]2 model as implemented within Jefferson County School District. This study has the potential to meaningfully advance our understanding of early mathematics interventions both in terms of impact and cost-effectiveness.

ROBIN LEAKE & NANCY LUCERO, GSSW



National Child Welfare Capacity Building Center for Tribes
Administration for Children and Families, \$3.7m

Capacity Building Center for Tribes (CBCT) will be the principal Children's Bureau (CB)-supported technical assistance (TA) provider responsible for building the capacity of tribal child welfare systems. CBCT will assist tribes in improving their practice and programs by assessing the most pressing needs for improvement as the foundation for identifying TA priorities. CB believes that effective training, coaching, tools, tailored consultation, and other support services can enhance the knowledge and skills of child welfare professionals and build organizational capacity to increase the likelihood that child welfare agencies can improve outcomes for children and families.

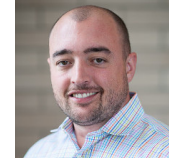
AWARD ABSTRACTS

LARGE GRANTS/CONTRACTS



UNIVERSITY of
DENVER

JONATHAN MOYER, JKSIS



The Learning Contract
QED Inc., \$1.8m

The Pardee Center will provide services as needed under the USAID/Uganda Learning Activity. This experience includes: quantitative forecasting using the International Futures (IFs) forecasting system, which is developed and maintained by the Pardee Center. IFs has been used to inform development planning for several USAID country and regional missions; training and capacity development on IFs, quantitative analysis, scenario planning, and data management for dozens of organizations; data management and visualization to enhance understanding of development trends.

ERICA LARSON, ROBIN TINGHITELLA & JULIE MORRIS, NSM



COLLABORATIVE RESEARCH: RoL: The Evolution and Maintenance of Variable Species Boundaries
National Science Foundation, \$1.5m

The objective of this proposal is to test the hypothesis that species boundaries are an emergent property of multiple variable barriers. The proposed research will integrate field-based and common garden studies of barrier phenotypes (temporal, habitat, behavioral, fertilization, and postzygotic isolation) with patterns of spatial variation in recombination, hybridization, and selection. Hybrid zones of North American field crickets will be replicated to understand variation in reproductive barriers across different scales of biological diversity.

SARAH WATAMURA & JULIA DMITRIEVA, CAHSS



Advancing Engagement and Efficacy of Interventions for Co-Morbid Sleep and Behavior Problems in Young Children and Dynamics by TRPML1 in Neurons
Boston University, \$1.4m

This project will study whether behavior and sleep problems in toddlers are best remediated with existing interventions that target behavior management, sleep, or both. The sub-award will take responsibility for over half of the planned recruitment, running and evaluation of data from 300 families. This will include delivery of the two planned interventions and pre- and post-intervention research data collection. We will also serve as the statistical analysis hub for the entire project, analyzing data from all 500 planned families.

AWARD ABSTRACTS

LARGE GRANTS/CONTRACTS



UNIVERSITY of
DENVER

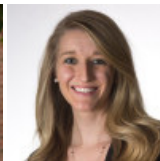
KIMBERLY GORGENS & LAURA MEYER, GSPP



***University of Denver COST Program
Health Resources and Services Administration, \$1.35m***

GSPP will train doctoral students to specialize in Opioid Use Disorder (OUD) and other Substance Use Disorder (SUD) treatment and prevention in an integrated, interdisciplinary setting in the Denver-Metro community. Students will take courses at GSPP and field placements with Denver Health and Salud Family Health Centers. Students will also learn about tele-behavioral health as a service provision tool and have field experience with such provision.

MICHELE HANNA, MICHAEL TALAMANTES & ERIN POOLE, GSSW



***CLIMB-OWEP
Health Resources and Services Administration, \$1.11m***

The purpose of CLIMB-OWEP is to enhance community-based experiential training for concentration year MSW students preparing for work in behavioral health with an emphasis on Opioid Use Disorder (OUD) and other Substance Use Disorders (SUD).

STUDENT RESEARCH & SCHOLARSHIP

More graduate and undergraduate students were supported by funding for research and scholarship in FY 2020, a 19% increase over FY 2019. The University of Denver contributed grant funding, supporting more than 600 students and resulting in 20% of all students paid on campus being supported by grants. Additionally, the number of graduate assistantships are on the rise, more than doubling from FY 2010 to present.

In the nine years of awarding conference travel grants, DU graduate students, representing 9 divisions and more than 39 programs, have presented in 90 U.S. cities, 34 U.S. states, and 29 countries, at a number of competitive conferences. In 2019-2020 awards averaged \$508, allowing DU's students to advance the scholarship in their respective fields through innovative and groundbreaking research.

FY 2020 also saw the inaugural year of the [Undergraduate Research Journal](#), which published two complete issues, featuring 24 articles, biographies, and interviews, all authored and peer reviewed by DU undergraduate students.

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602

*students were supported
by \$3.2 million
in grant funding
in FY 2020*

A large maroon circle containing the number 161 and descriptive text.

161

*graduate research
assistantships were supported
by grant funding during
FY 2020*

A large gray circle containing the percentage 20% and descriptive text.

20%

*of all students paid on campus
were supported by grants for
FY 2020*

12

UNDERGRADUATE SCHOLAR TRAVEL FUND GRANTS

AWARDED IN
FY 2020
TOTALING
\$9,240

01

GRFP AWARD

AWARD RECIPIENT:

AARON WIKLE, NSM

1,991

MASTER'S DEGREES

AWARDED IN
FY 2020

35

UNDERGRADUATE SUMMER RESEARCH GRANTS

AWARDED IN FY 2020
TOTALING \$120,091

15

GRADUATE INTERNATIONAL INTERNSHIP GRANTS

AWARDED IN
FY 2020
TOTALING
\$20,470

25

UNDERGRADUATE PARTNERS IN SCHOLARSHIP (PINS) GRANTS

AWARDED IN
FY 2020
TOTALING
\$35,261

183

DOCTORAL DEGREES

AWARDED IN
FY 2020

RESEARCH & SCHOLARSHIP SHOWCASE

Going Virtual

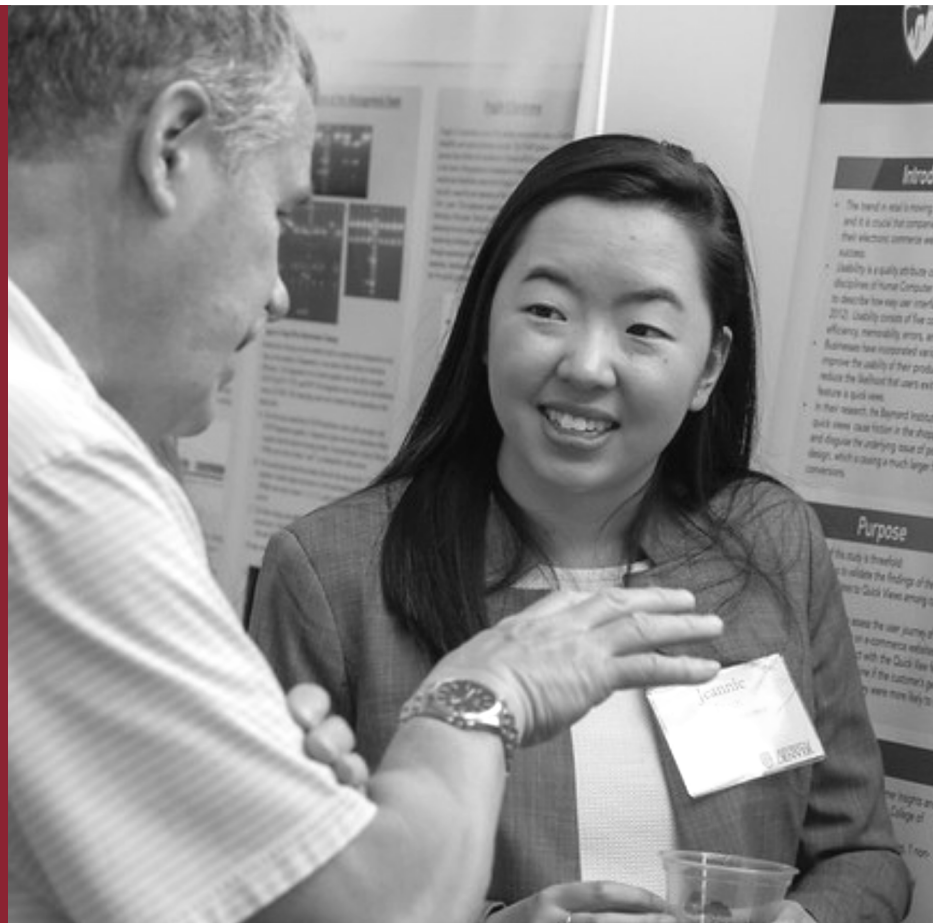
This year, the DU Research & Scholarship Showcase pivoted to an online platform, allowing presenters to still showcase their work, even in the midst of a pandemic.

14

graduate students
participated in the 2020
Research & Scholarship Showcase

75

undergraduate students
participated in the 2020
Research & Scholarship Showcase



The second annual Research and Scholarship [Showcase](#) was held as a Twitter conference in response to the outbreak and spread of COVID-19. All presenters crafted engaging visual presentations using Prezi, and keynote speakers produced an additional video lecture to share their research and findings. Event attendees were able to view presentations, ask questions, and leave comments for presenters using the designated event hashtags. All research presentations are still available on Twitter by searching #DURSS2020 for all research projects and feedback, #DUUGResearch for undergraduate research, and #DUGradResearch for graduate research.



KEYNOTE SPEAKERS

Marianne Hughes, CAHSS

How Power Dresses: The Gendered Aesthetics of Uniform A Comparative Case Study of Contemporary Female Heads of State and/or Government in Australia, Indonesia, and the Philippines

Grant Goble, MCE

The Impact of a High School Theatre Arts Program on Student Academic and Non-Academic Outcomes: A Case Study

Christina Herrera, DCB

Revenue Management and Restaurants

Samir Rezgui, NSM

Synthesis of Fluorescent Compounds to Detect Ethylene Gas

Kaitlyn Elting, GSSW

The One Health Impacts of Trap-Neuter-Return

Andres Pulido, DCB & Avery Stackle, JKSI

Advancing A Community Solution Towards Homelessness

Note: All research presentations are still available on Twitter by searching #DURSS2020 for all research projects and feedback, #DUUGResearch for undergraduate research, and #DUGradResearch for graduate research.

OFFICE OF RESEARCH INTEGRITY & EDUCATION

32%

increase in
submissions
over FY20

As our investigators adapted to the challenges of conducting research in labs and converting in-person interactions with research participants to remote options in response to the COVID-19 pandemic, an increase for research project reviews involving human subjects, animal welfare, and biosafety continued, averaging 32% over the previous year. The number of submissions for research compliance review peaked in January 2020, reaching 85 new submissions that month, and continued to plateau, averaging 70 submissions per month for the remainder of the fiscal year.

45%

of submissions are
by student
investigators

The Office of Research Integrity and Education (ORIE) professional team processed 1,045 submission requests, conducted 22 one-on-one post approval monitoring visits, and provided an average of 20 consultations with faculty, staff, and students each month. Many students are required to complete a research project to fulfill a Masters or Doctoral program. The ORIE professional staff offered regular regulatory guidance for student investigators who represented 45% of the total submission volume.

The Research Compliance & Education Program, DU's post approval monitoring program, continues to demonstrate how in-depth reviews of approved research during one-on-one sessions with faculty investigators has proven to be a valuable resource in recognizing not only exceptional investigators on our campus, but providing professional guidance to ensure ongoing compliance.



INTELLECTUAL PROPERTY & TECHNOLOGY TRANSFER

This year, in spite of the difficulties presented by COVID-19, the Office of Intellectual Property and Technology Transfer (OIPTT) continued to experience a growth in number of research-related agreements, which shows the tremendous resilience of our researchers. There also has been an unprecedented number of eight patents granted to our researchers. In addition, DU received \$160,000 in royalty revenue from three technology licenses and distributed \$106,667 to inventors and departments.

To continue to build the necessary legal and administrative infrastructure, in collaboration with the Office of Research Integrity & Education, OIPTT implemented a new data agreement review process to handle the increasing need of our researchers to access data and collaborate with other institutions. OIPTT will continue to strive to build trust and seek innovative ways to engage with the DU community.

35

Material Transfer Agreements
(16 stand-alone +
19 orders under master
agreements)

10

Non-Disclosure
Agreements (NDA) /
Confidentiality
Agreements (CDA)

29

Data Use Agreements (DUA) /
Data Share Agreements

3

Active
Technology
Licenses

4

Invention
Disclosures

8

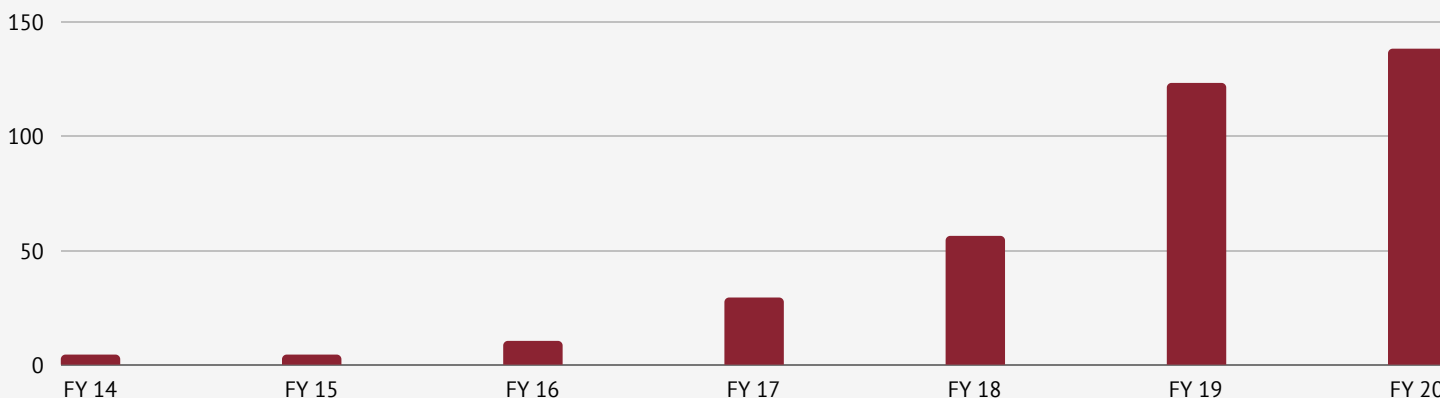
Granted
Patents

54

Other agreements which
implicate DU's intellectual
property

TOTAL AGREEMENTS PROCESSED

Since FY 2014, the total agreements processed has increased significantly





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