

# Innovation Update

## In this issue, you will find:

1. Message from Desert Horse-Grant
2. UCLA Innovation Fund - 2017 Biomedical Competition Awardees
3. 2018 UCLA Innovation Fund Biomedical Competition - Call for Proposals
4. 2018 UCLA Innovation Fund Computer Science Competition - Call for Proposals
5. Life Science Innovation Fund 2017 Competition Awardees
6. UCLA Technology Development Group
7. Magnify Accelerator - Open Call for Proposals
8. MedTech Partnering Conference - Open Call for Participation
9. The UCLA Healthcare Business Association Conference - Open Call for Participation
10. UCLA Life Science Innovation Day, Sponsored by Amgen/Gilead - Open Call for Participation
11. UCLA Startup in a Box - Open Call for Participation
12. Helpful websites for researchers/innovators

Submit an invention disclosure  
 Innovation website link for faculty at DGSOM  
 UCLA BioFund tool (identify non-NIH funding opportunities)  
 Some helpful policies on disclosing conflict of commitment and conflict of interest  
 Featured websites of UCLA Health innovative services, teams and offerings for our patients

## 1. Message from Desert Horse-Grant



*It is a pleasure to offer this UCLA Health Innovation newsletter to our community. Approximately one year ago, I joined the organization, working for Johnese Spisso, President of UCLA Health and CEO of UCLA Hospital System, and Dr. Kelsey Martin, Dean of the David Geffen School of Medicine (DGSOM), to identify and accelerate opportunities for innovation at UCLA Health. In my role as Senior Director for Research and Innovation, I work closely with an outstanding team of UCLA Health and DGSOM leaders. They include Dr. Stephen Smale, DGSOM Vice Dean of Research; Dr. Judith Gasson, DGSOM Senior Advisor for Research and Innovation; Dr. Steven Dubinett, Associate Vice Chancellor and Senior Associate Dean of the UCLA Clinical and Translational Science Institute (CTSI); Dr. Daniel Geschwind, Associate Vice Chancellor and Senior Associate Dean of Precision Health; Dr. Michael Pfeffer, Assistant Vice Chancellor and Chief Information Officer, UCLA Health; Karen Grimley, Chief Nursing Officer, UCLA Health; Santiago Munoz, Chief Strategy Officer, UCLA Health; Dr. Robert Cherry, Chief Quality Officer, UCLA Health; and Derek Kang, UCLA Health Chief Compliance Officer; as well as colleagues in UCLA Health Legal Affairs, UCLA Institute for Precision Health, mHealth, CTSI Clinical and Translational Research Center, and Data Governance. I also collaborate with many divisions within the UCLA Technology Development Group (TDG) led by Amir Naiberg, Associate Vice Chancellor, CEO and President of TDG, and with our entrepreneurial faculty, staff and supporters to help advance novel innovations and technologies in consultation with Dr. John Mazziota, Vice Chancellor of UCLA Health Sciences and CEO of UCLA Health. My focus is on research and innovation opportunities that affect the health system.*

*In my time here, I have observed the impressive extent to which faculty of the David Geffen School of Medicine at UCLA fuel biomedical and clinical innovation. UCLA Health nurses, trainees, staff and administrators continually innovate to advance patient care. Close attention is paid to all aspects of care, from primary care, to our tertiary and quaternary care settings. We see it in all aspects of the care that we deliver, from health and wellness to genomics; from psychiatry to surgery and recovery; and from oncology to transplantation. UCLA Health invests in novel therapeutics and state-of-the-art technologies to help solve unmet medical needs and to provide the highest levels of care to our patients. The leadership of UCLA Health has designed systems of healthcare delivery that optimize the experiences of our patients and contribute to their prompt healing and overall wellness. Innovation at UCLA Health, working in partnership with the UCLA Institute for Precision Health, promises to create the medicine of the future – a medicine that is perfectly tailored to each individual.*

*The caliber of our faculty, coupled with our strategic and targeted recruitment and the fact that our health system shares a campus with the country's No. 1 rated public university, uniquely positions UCLA Health to excel in biomedical innovation. The nearness of the UCLA's schools of Medicine, Dentistry, Business, Engineering, Public Health and Nursing facilitates constant dialogue and partnership among researchers and clinicians. UCLA Health provides opportunities for faculty inventors, philanthropists, investors and industry to propel new ideas forward — ideas with the potential to transform healthcare and medical practice. I came to UCLA in January 2017 to serve as a resource and conduit between UCLA Health, DGSOM and the UCLA campus. My goal is to identify opportunities in our clinical enterprise that can benefit from the innovative ingenuity of UCLA faculty, staff and trainees; to facilitate the testing and implementation of innovative technologies and approaches within UCLA Health; and to help bring UCLA Health and DGSOM innovations to the marketplace. I work closely with Dr. Judith Gasson to achieve these goals. As part of her role as DGSOM Senior Advisor for Research and Innovation, Dr. Gasson leads the UCLA Innovation Fund Scientific Review Committee. Together, Dr. Gasson and I provide expertise and guidance to faculty, staff and trainees across the spectrum of our healthcare enterprise, from biomedical and translational research to clinical care and healthcare delivery.*

*I welcome the opportunity to connect with colleagues across UCLA who are involved in innovation in the biomedical and health arenas. Our goal is to increase awareness and to provide support for all initiatives in innovation through newsletters, dialogues, presentations and one-on-one meetings. Please share with me ([dhorsegrant@mednet.ucla.edu](mailto:dhorsegrant@mednet.ucla.edu)) any announcements you would like distributed in a future newsletter or on our website: <http://medschool.ucla.edu/innovation>.*

**Desert Horse-Grant**  
 Senior Director, UCLA Health Research and Innovation  
 UCLA Health / DGSOM  
[dhorsegrant@mednet.ucla.edu](mailto:dhorsegrant@mednet.ucla.edu)

## 2. UCLA INNOVATION FUND - 2017 Biomedical Competition - Awardees



The [UCLA Innovation Fund](#) was created in 2017 with a singular mission to bridge the gap between academic research and industry/venture capital interests to quickly bring new technologies from the lab to the market.

The UCLA Innovation Fund is a collaboration between UCLA Health/David Geffen School of Medicine (DGSOM), UCLA Henry Samueli School of

Engineering & Applied Science and the UCLA College's Divisions of Life Sciences and Physical Sciences. The opportunity to receive funding was open to any UCLA faculty or faculty-led team (from any unit on the campus) who signed the UCLA Patent Policy.

The first funded competition was a call for biomedical proposals focused on novel therapeutics, medical devices/diagnostics and digital health. More than 300 faculty submitted proposals, and finalists were selected after a rigorous scientific review committee, led by Dr. Gasson, and an intellectual property (IP) review, led by TDG teams under the direction of Thomas Lipkin, Head of New Ventures, and Emily Loughran, Senior Director of Licensing and Strategic Alliances. The finalists pitched proposals to outside seed, venture capital and biotech advisors who were recruited by Tom Lipkin, PhD, David Drasin, PhD, and Dave Harrison, MD/MBA from the New Ventures team within the TDG. In an all-day campus pitch-day visit, industry experts heard pitches from the applicants and provided thoughtful business reviews on which projects had the highest likelihood of commercialization. Twelve of the 105 projects were presented received funding.

Awarded funding and support is provided to advance project-specific milestones, further enabling these technologies to be licensed to an existing company or startup. These funds are to support commercialization activities that would not be supported by basic research grants.

The following projects were selected as winners of the 2017 UCLA Innovation Fund.

### Novel Therapeutics Track

#### **Biomaterials for Brain Repair After Stroke**

This project is to develop a biomaterial that repairs the brain after stroke, by regenerating brain connections and brain blood vessels.



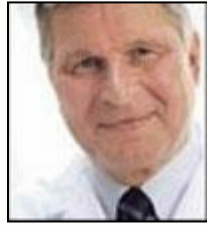
*Thomas Carmichael, MD, PhD  
Neurology*



*Tatiana Segura, PhD  
Biomedical Engineering*

#### **Development of a New Class of Selective Steroid-like Estrogen Receptor Downregulators**

This project is planned to develop a new series of selective estrogen receptor antagonists with the proper biologic properties to treat both endocrine-sensitive and -resistant breast cancers in the clinic.



*Richard Pietras, MD, PhD  
Hematology-Oncology*



*Michael Jung, PhD  
Chemistry & Biochemistry*

#### **Genome-wide Identification of Anti-Interferon Functions in Influenza A Virus Enables Rational Vaccine Design**

This project is to develop a new approach to creating vaccines against viruses by systematic identification and elimination of anti-interferon functions of the viral genome to attenuate the viruses and increase immunogenicity.



*Ren Sun, PhD  
Molecular and Medical Pharmacology*

#### **MRI-Guided HIFU-Responsive Theranostic Nanoparticles**

The goal of this project is to develop and refine next-generation magnetic resonance imaging (MRI)-guided high-intensity focused ultrasound (HIFU)-responsive theranostic nanoparticles and translate the new technology for drug-delivery applications.



*Jeffrey Zink, PhD  
Chemistry & Biochemistry*



*Holden Wu, PhD  
Radiological Sciences and Bioengineering*

#### **New Compounds that Promote Hair Growth**

Developed novel compounds that promote a metabolic enzyme activity to promote hair follicle stem cell activation and hair growth, and translation of these efforts towards clinical application.



*William Lowry, PhD  
Molecular, Cell &  
Developmental Biology*



*Heather Christofk, PhD  
Biological Chemistry*



*Michael Jung, PhD  
Chemistry & Biochemistry*

### Medical Devices/Diagnostics Track

#### **Early Screening for Gestational Diabetes**

Identified two maternal urinary metabolites that can be measured in the first trimester to screen for gestational diabetes.



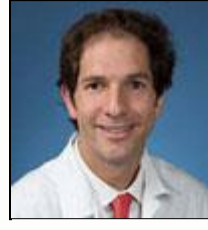
Brian Koos, MD, PhD  
Obstetrics and Gynecology

**Orthovarnish Protects Orthopaedic Surfaces from Infection**

This project develops a point-of-application coating to protect orthopaedic implants from infection.



Tatiana Segura, PhD  
Biomedical Engineering



Nicholas Bernthal, MD  
Orthopaedics

**Terahertz Imaging System for Nondestructive Quality Control of Dental Laboratory Products**

This project aims to develop terahertz scanner that captures 3D images of dental laboratory products for their non-destructive quality evaluation.



Mona Jarrahi, PhD  
Electrical and Computer  
Engineering



Alireza Moshaverenia, DDS, MS,  
PhD, FACP  
Advanced Prosthodontics,  
Dentistry



Aydogan Ozcan, PhD  
Electrical and Computer  
Engineering

**Transventricular Access Device for Mitral Valve Repair**

Developed a transventricular access device for mitral and aortic valve Interventions.



Kalyanam Shivkumar, MD, PhD  
Medicine, Interventional  
Cardiology/Cardiovascular Disease



Olcay Aksoy, MD  
Medicine, Interventional  
Cardiology/Cardiovascular Disease

**Digital Health Track**

**Computer-Aided Diagnosis in Spine Medicine**

Artificial intelligence driven diagnosis of spine pathologies on MRI can improve accuracy of diagnosis and reduce over- and under-treatment of spinal disorders, thereby reducing costs, improving efficiency and improving quality of life metrics.



Luke Macyszyn, MD, MA  
Neurosurgery & Orthopedics



Bilwaj Gaonkar, PhD  
Neurosurgery

**Wearable Assistive Technology for Neurological Visual Loss**

Designed a mobile application that takes advantage of the image-processing power of head-mounted displays to maximize the remaining field of vision in patients with neurological vision loss.



Navid Amini, PhD  
Computer Science



Kouros Nouri-Mahdavi, MD  
Ophthalmology

**3. Announcing the 2018 UCLA INNOVATION FUND Biomedical Competition - Call for Proposals**

**UCLA** **2018**  
**INNOVATION**  
**FUND**

**CAMPUS-WIDE BIOMEDICAL COMPETITION**  
**UP TO \$200K AVAILABLE PER PROJECT**

We are pleased to announce there will be a 2018 Biomedical Competition. Awards range from \$50,000-\$200,000 (plus business development assistance) to support novel therapeutics, medical devices, diagnostics and digital health technologies. If you are interested in submitting a proposal for this program, we encourage attendance at one of the informational sessions to learn about the differences between this funding mechanism and typical grant sources.

The goal of the UCLA Innovation Fund is to accelerate the movement of technologies from idea to the market, bridging the gap between academia and industry/investor interest. The UCLA Innovation Fund focuses on commercialization activities that are not supported by basic research grants, solicits external industry/investor feedback and provides dedicated project management.

We invite all UCLA faculty or designees to attend an information session to learn about the biomedical competition and to ask questions about the program and application process.

Letters of Intent will be due March 30, 2018.

Informational sessions will be offered:

March 1st at 4:00pm at CNSI in the Executive Conference Room 3141 (entry level)  
March 8th at 12:00pm at CHS in Room 13-105 (lunch will be served)

Please RSVP for informational sessions to Rosely Encarnacion: [rencarnacion@mednet.ucla.edu](mailto:rencarnacion@mednet.ucla.edu)

Visit [tdg.ucla.edu/ucla-innovation-fund](http://tdg.ucla.edu/ucla-innovation-fund) for more information or to apply.

---

#### 4. Announcing the 2018 UCLA INNOVATION FUND Computer Science Competition - Call for Proposals

The UCLA Innovation Fund also is partnering with [Bow Capital](#) and [Osage University Partners](#) to launch a campus-wide computer science competition. The mission of the fund is to support the development of early-stage software at UCLA to the point of startup company formation. First-and-second place winners will receive investments to support commercialization activities that would not be supported by basic research grants.

First Place Winner: \$75,000 / Second Place Winner: \$50,000

The award will be converted into equity upon company formation through a Simple Agreement for Future Equity (SAFE) agreement. This is an opportunity to receive venture capital investment, which additionally provides business expertise and connections to further accelerate projects to market. In addition, winners will be offered Startup in a Box service-provider support and a joint press release. The competition will consist of an online application with finalists invited to pitch to a panel of judges in front of an audience.

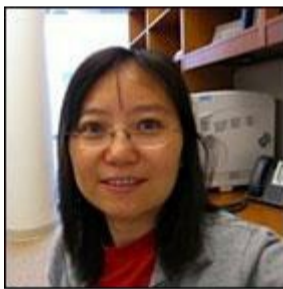
March 2, 2018 - Online Applications Due  
March 30, 2018 - Finalists Announced  
May 17, 2018 - Pitch Day

The application can be accessed at: [www.judgeability.com/ucla-cs-2018-application](http://www.judgeability.com/ucla-cs-2018-application)

More information about the competition can be found at: [tdg.ucla.edu/computer-science-competition](http://tdg.ucla.edu/computer-science-competition)

---

#### 5. Life Science Innovation Fund 2017 Competition Awardees



*Jau-Nian Chen, PhD  
Molecular, Cell and  
Developmental Biology*

##### **VDAC2-Dependent Therapeutic Intervention for Heart Failure and Arrhythmias**

Award of \$75,000 with matching funds from the UCLA Technology Development Group Uncovered a novel VDAC2-dependent mitochondrial Ca<sup>2+</sup> uptake mechanism that controls Ca<sup>2+</sup> handling in cardiac muscle.



*Michelle Craske, PhD  
Psychology*

##### **Prototype for Smartphone Application for Treatment of Anhedonia in Anxiety and Depression**

Award of \$25,000 matching funds from the UCLA Depression Grand Challenge Developed a novel behavioral intervention targeting anhedonia, which is derived from neuroscience of the reward system, and have found it to effectively increase positive emotions.

---

#### 6. UCLA Technology Development Group

The UCLA Technology Development Group (TDG) promotes UCLA innovation, research, education and entrepreneurship to benefit society. Working with UCLA TDG helps facilitate the translation of UCLA discoveries into new products and services that create economic value to support UCLA's scholarly and educational missions. Under the direction of AVC Amir Naiberg, TDG is organized into Licensing, Industry Sponsored Research and New Ventures. The UCLA TDG office manages a large portfolio of technologies and license agreements, and it has a rich history of startup company formation. For more information, please visit [www.tdg.ucla.edu](http://www.tdg.ucla.edu)

---

#### 7. Magnify Accelerator - Call for Proposals



**MAGNIFY**  
at CNSI

As one of the world's top research universities, UCLA is home to innovative and leading-edge scientific, biomedical and pharmaceutical research. Scientists and entrepreneurs are able to transform ideas into commercial products that can significantly affect people's lives. Magnify is an on-campus incubator that is helping UCLA and Los Angeles-based startups.

Housed within the California NanoSystems Institute (CNSI), Magnify features flexible laboratory and office spaces for companies developing transformative technologies in life science, energy, materials and information technology. Portfolio companies have access to a collection of advanced instrumentation from six state-of-the-art technology centers as well as business development, funding advice and entrepreneurial networking opportunities to increase a company's likelihood for success.

Currently, Magnify is seeking applicants through the end of March 2018. Companies that have been incorporated for less than five years and who have sufficient working capital to achieve critical business milestones and cover six months of incubator fees are encouraged to apply.

More information on Magnify, application criteria and the application process can be found at our website [cnsi.ucla.edu/incubator](http://cnsi.ucla.edu/incubator) or by emailing Brian Benson, Director of Entrepreneurship and Commercialization at CNSI, [brian@cnsi.ucla.edu](mailto:brian@cnsi.ucla.edu).

---

## 8. MedTech Partnering Conference - Call for Participation



UCLA's 6th Annual MedTech Partnering Conference will take place on Tuesday, March 6, 2018 at CNSI at UCLA, 570 Westwood Plaza. UCLA's Technology Development Group has teamed with several leading research institutions in Southern California to provide a unique opportunity for academic inventors, investors and industry leaders to establish new relationships to advance medtech innovation. This year's conference features investor and industry expert panels, faculty research and startup presentations and opportunities for networking. The conference is co-funded by a UCLA CTSI Catalyst Award, which supports team-building activities that advance translational science and promote collaborations across disciplines and CTSI institutions.

UCLA TDG is proud to partner with [MedTech Innovator](#) to host its Los Angeles Pitch Event on March 5, 2018, the southwest qualifying round of its \$500,000 competition. The event features pitches from best-in-class medical device, diagnostic and digital health companies. Attendees will have the opportunity to network with MedTech Innovator partners, including investors, providers and senior executives from medtech companies such as Johnson & Johnson, BD and others. [www.eventbrite.com/e/6th-annual-ucla-medtech-partnering-conference-registration-37132022880](http://www.eventbrite.com/e/6th-annual-ucla-medtech-partnering-conference-registration-37132022880)

---

## 9. The UCLA Healthcare Business Association Conference - Call for Participation



The UCLA Healthcare Business Association Conference is being held on February 24 at UCLA Carnesale Commons, 251 Charles E Young Drive West. The UCLA Anderson HBA Healthcare Conference is among the largest university-led healthcare events in Southern California, connecting 300-plus business professionals, students and members of academia from across the state. Panels and keynotes feature marquee executives, thinkers and practitioners from a diversity of organizations influencing the future of healthcare. Past keynote speakers include Peter Diamandis (Founder, XPrize), Johnese Spisso (President, UCLA Health), Dr. Gunnar Trommer (Principal, BCG DigitalVentures) and Rich Roth (CFO, Dignity Health) [www.andersonhba.com/hba-conference](http://www.andersonhba.com/hba-conference)

---

## 10. UCLA Life Science Innovation Day - UPCOMING EVENT - Call for Participation

Life Science Innovation Day will take place on Wednesday, June 13, 2018 at the UCLA Luskin Conference Center. This inaugural event is sponsored by Amgen and Gilead – Kite Pharma with the mission of raising awareness of UCLA's translational and entrepreneurial ecosystem, facilitating exchanges between pharma and biotech companies and UCLA researchers and startups and providing opportunities for sponsored research, licensing and partnering. More than 500 participants are expected to attend at the UCLA Luskin Conference Center. Events will include: CEO Fireside Chat with Kite Pharma Founder Arie Belledgrun MD, FACS; partnering breakout session; seminars and panel discussions; and a translational research poster session. For more information, updates and sponsorship opportunities, please email: [innovation@tdg.ucla.edu](mailto:innovation@tdg.ucla.edu)

---

## 11. Startup in a Box - Call for Participation



TDG is committed to fostering the success of UCLA startups. Modeled after QB3's program supporting UCB, UCSF and UCSC, [UCLA Startup in a Box](#) was created to lower barriers for UCLA entrepreneurs by providing introductions to pre-vetted partners across a broad spectrum of service areas. Current partnerships include legal, banking, accounting, insurance, HR benefits/management, real estate, cloud computing, consulting services, non-dilutive funding and CRO referrals. Additional partnerships will be added over time. Any and all fees are discussed directly with each partner; some are able to offer discounts or fee deferrals. Acceptance into the program starts with completing and submitting the [SIAB Application](#). Direct questions to [siab@tdg.ucla.edu](mailto:siab@tdg.ucla.edu).

## 12. Helpful websites for faculty

### a. Submit an Invention with TDG

UCLA TDG houses an experienced team of technology licensing and industry partnering professionals and is the campus-wide resource that provides specialized services to protect intellectual property and to partner with entrepreneurs, investors and industry. Through licensing intellectual property, negotiating industry agreements and forming startups, UCLA TDG supports UCLA's mission of research, education and service. [tdg.ucla.edu/submit-invention-report](http://tdg.ucla.edu/submit-invention-report)

### b. Innovation Website for DGSOM faculty

UCLA Health/DGSOM is committed to supporting faculty entrepreneurs in the development of innovative technologies to advance biomedical breakthroughs, novel therapeutics and cures for patients. The information on the website is broken into two sections; the first section showcases opportunities for faculty to apply for financial support and the second section showcases workshops, resources and key contacts for DGSOM faculty. [medschool.ucla.edu/innovation](http://medschool.ucla.edu/innovation)

### c. UCLA BioFund Tool - Search Non-NIH sources of Funding



UCLA Health and the DGSOM debuted a tool to make it easier for biomedical researchers to find non-NIH sources of funding. The open-source database, UCLA BioFund — at [biofund.healthsciences.ucla.edu](http://biofund.healthsciences.ucla.edu) — aims to identify funding opportunities for researchers. Similar databases are available nationally, but none seem to comprehensively and specifically target biomedical research. The site currently lists 1,000-plus funding opportunities; much of the database was populated by gathering names of foundations that have awarded grants to UCLA faculty over the past few years. Users can customize searches based on keyword, sponsor name, disease area and other criteria.

### d. Some Helpful Policies on Disclosing Conflict of Commitment and Conflict of Interest

Faculty members who are interested in entrepreneurial endeavors should be aware that there are a number of policies and paperwork required based on title, level and compensation. It is advisable to get an individual consultation to ensure everything is complete. Here is an aggregation of some helpful policies, but this may not be a complete list of what is needed, nor does it serve at this time as a checklist for faculty. Faculty may have differing or varying departmental and school disclosure responsibilities in addition to what is required at the institutional level. This newsletter is for general knowledge sharing and does not provide legal advice.

#### David Geffen School of Medicine Faculty Contact for Additional Information

School of Medicine faculty have an excellent resource when navigating conflict of interests and conflict of commitment:

Jonathan R. Hiatt, MD  
Vice Dean for Faculty  
[jhiatt@mednet.ucla.edu](mailto:jhiatt@mednet.ucla.edu)

#### Policies

##### Conflict of Commitment

- [Conflict of Commitment and Outside Activities of Health Sciences Compensation Plan Participants – FAQs under APM-670 and APM-671](#)
- [Compensation Plan Documents](#)

##### Conflict of Interest

- [Conflict of Interest in Research](#)
- [Who Must File | UCOP](#)
- [Senior Management Group Outside Professional Activities](#)

##### UC Patent

- [UC Patent Policy](#)
- [Inventor Share Policy](#)

[Helpful link to APM 025](#) - for faculty members who are not members of the Health Sciences Compensation Plan.

### e. Featured websites of innovative services, teams and offerings for our patients

- Animal Assisted Therapy: [www.uclahealth.org/PAC/about-us](http://www.uclahealth.org/PAC/about-us)
- CASIT: [surgery.ucla.edu/casit](http://surgery.ucla.edu/casit)
- Center For East West Medicine: [cewm.med.ucla.edu](http://cewm.med.ucla.edu)
- International Services: [www.uclahealth.org/international-services/technology-and-innovation](http://www.uclahealth.org/international-services/technology-and-innovation)
- Patient Experience: [www.uclahealth.org/patient-experience](http://www.uclahealth.org/patient-experience)
- Robotic Telemedicine: [neurosurgery.ucla.edu/remote-presence-robots-in-icu](http://neurosurgery.ucla.edu/remote-presence-robots-in-icu)
- Spiritual Care: [www.uclahealth.org/spiritual-care](http://www.uclahealth.org/spiritual-care)
- Telehealth: [www.uclahealth.org/telehealth](http://www.uclahealth.org/telehealth)
- ValU: [www.uclahealth.org/valu](http://www.uclahealth.org/valu)

[Download PDF](#)