

2019 Brock International Prize in Education Nominee

**Sugata Mitra** 

Nominated by Jeff McClellan

#### **HUB International Mid-America**



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I am delighted to nominate Dr. Sanjeev Arora for the 2019 Brock International Prize in Education. His belief - that freely sharing knowledge empowers us to make our communities better - is at the core of Project ECHO (Extension for Community Health Outcomes). By democratizing information and using technology to connect people, Dr. Arora, through Project ECHO, is changing the world. The model, created out of Dr. Arora's need to find a better way to deliver medical knowledge and educate caregivers in underserved populations, is on target to improve the lives of one billion people by 2025.

In 2004 New Mexico had over 28,000 people with Hepatitis C and less than 5% were being treated. Dr. Arora, a liver specialist, realized something had to change and it had to change fast. Thousands of people were dying unnecessarily because no primary care provider was treating Hepatitis C and there were only two liver specialist in the entire state who were seeing patients. Dr. Arora knew "PEOPLE WERE DYING OF A CURABLE DISEASE BECAUSE THEY WERE NOT ABLE TO GET THE CORRECT DIAGNOSIS AND TREATMENT IN TIME!" Project ECHO was born as an answer to the limitations of the medical delivery model at the time.

While thinking about how to solve this problem, Dr. Arora realized he could use the same technology he used to Skype with his daughter in Boston to communicate with medical caregivers anywhere. With help from his associates, state and federal agencies and The University of New Mexico, he created a model to deliver solutions to underserved areas. Using technology, a best practices disease management model, case-based learning and web-based database, Project ECHO transformed the delivery of health care and saved lives. After only eighteen months, the wait time to see a specialist was reduced from eight months to two weeks and the results of Hepatitis C treatment in rural areas was as good as or better than the treatment at the University medical facility. The results showed that patients who could stay close to home and use a primary care physician they trusted, got better care. Thousands of lives and millions of health care dollars were saved.

What started as a transformation of health care delivery for liver disease is now a movement to change the health of the world. The tremendous educational opportunity provide by ECHO is described by Dr Ed. Don Raleigh, the Superintendent of Pryor Public Schools as follows: "The Project ECHO platform provides a unique mentoring and sharing opportunity for educators that allows real life situations to be addressed using the collective expertise of all the professionals involved in the presentation. This deep dive on a pertinent case study is unprecedented for most educational leaders."

Today, The ECHO model is freely shared as a better way to deliver solutions to complex problems in medicine, education and law enforcement. Making communities "healthy" is at the core of everything Project ECHO does.

The Brock Prize "is about innovative ideas that make a meaningful change in how we think and act." Dr. Arora's original and creative contribution to the science and art of education is having an unprecedented impact on educating men and women in health care, law enforcement and education; and is dramatically changing the communities in which it is utilized.

Sincerely

Jack Allen, Jr.

Jack N aller, J.

Chairman Emeritus of HUB Mid-America



# Project ECHO®

(Extension for Community Healthcare Outcomes) Moving Knowledge Not People

## **ECHO Profile**

Welcome to Project ECHO, a division of the University of New Mexico Health Sciences Center. ECHO's mission is to develop the capacity to demonopolize knowledge and amplify the capacity to provide best practice care for underserved people all over the world.



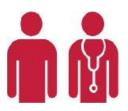
https://echo.unm.edu/about-echo/our-story/

The ECHO Institute, founded by Sanjeev Arora, MD, believes that sharing knowledge through participatory education can empower anyone, anywhere, to make their communities stronger, healthier, and better. Our mission is to share the ECHO model™ as a better way to both solve the world's complex problems as well as help its underserved populations. ECHO's goal is to touch one billion lives by 2025.

Millions around the world needlessly suffer and die every day from diseases and chronic health conditions we know how to treat and cure, simply because they lack access to proper medical care with the right knowledge in the right place at the right time. The ECHO model has proven to be a highly effective, simple, low-cost, scalable solution for addressing this global crisis. Project ECHO is a lifelong learning and guided practice model that revolutionizes education and exponentially increases workforce capacity to provide best practice specialty care and reduce disparities through its hub and spoke knowledge sharing networks.



People need access to specialty care for complex conditions.



Not enough specialists to treat everyone.



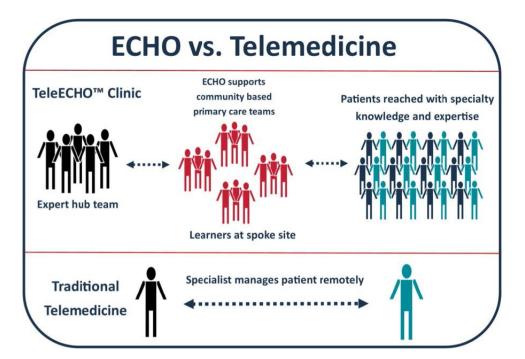
ECHO trains primary care clinicians to provide specialty care services.



Patients get the right care, in the right place, at the right time.

Guided practice is provided through mentoring and case-based learning. A sense of community is built in which all teach and all learn. Expert inter-disciplinary specialist teams are linked with primary providers by leveraging technology - a simple teleconferencing platform - and by providing regularly scheduled teleECHO Programs. Participants are encouraged to attend regularly.

During sessions, participants share their de-identified complex cases for specialists to share their expertise, guidance, and feedback, as well as didactic education. As the participants learn best practice, they, too, share their knowledge with each other. Through this process they develop the skills and knowledge to treat not just the presented cases, but future cases with similar conditions, becoming sub-specialists in their own communities. This increases the availability of quality care, in turn increasing health outcomes, reducing travel costs, waiting times, and avoidable complications.



The ECHO model™ is not "telemedicine" wherein the specialist assumes the care of the patient, but instead a guided practice model where the primary care provider retains responsibility for managing the patient, operating with increasing independence as their skills and self-efficacy grow. Outcomes are monitored through a webbased database.

And it isn't just medicine: the need for rapid knowledge dissemination and building mentoring communities is vast in almost all disciplines. The same model is used to leverage scarce resources in other fields such as K-12 education, law enforcement, laboratory science, disaster response, advocacy, and medicolegal work. Specialist can gather anywhere to give didactic training and manage the review of cases. As in medicine, the learners become increasingly independent and are responsible for applying the knowledge to their situations.

The ECHO model provides a solution to these pervasive problems. Today, over 220 partners in 32 countries across 6 continents use the ECHO model to tackle more than 100 key problems affecting lives and livelihoods.

## **History**

Dr. Arora, a liver disease doctor in Albuquerque, was frustrated that thousands of New Mexicans with hepatitis C could not get the treatment they needed because there were no specialists where they lived. The clinic where he worked was one of only two in the entire state that treated hepatitis C. But, he was determined that all patients in need of treatment should get it.

Dr. Arora created Project ECHO so that primary care clinicians could treat hepatitis C (HCV) in their own communities. His vision was first piloted in New Mexico for the treatment of HCV in June 2003 at University of New Mexico Health Sciences Center (UNMHSC). This effort was aided by

a \$1.5 million-dollar grant from the Agency for Healthcare Research and Quality (AHRQ) in 2004. Additional funding was received from the New Mexico State Legislature and Department of Health, with two additional grants from AHRQ in 2007 and 2009.

Also in 2007, Project ECHO® came in first among more than 300 entries from 27 countries in winning the Changemakers Award. This international competition was sponsored by the Robert Wood Johnson (RWJF) and Ashoka Foundations to identify programs that are changing the



HCV ECHO session.

paradigm in the education and practice of medicine. In 2009, Project ECHO® received grant funding from the RWJF to fund the replication of the ECHO model and demonstrate that it is a robust paradigm to expand best practice care for vulnerable populations. This grant of over \$5 million dollars allowed ECHO to expand to six other disease areas and the University of Washington. An article describing the expansion of the ECHO model was published in June 2011 in Health Affairs.

## **Evaluation & Impact**

Funding received from 2003 to 2011 enabled Dr Arora to research the outcomes and effectiveness of the ECHO mentoring model. This consisted of measuring impact of rural clinicians' participation in TeleECHO clinics, including the effect on treatment rates, self-efficacy and overall professional satisfaction. The results of this research were first published in <a href="Hepatology in September 2010">Hepatology in September 2010</a>. This article demonstrated that Project ECHO® has the potential to be a significant disruptive innovator in three major areas: 1) access to specialty health care, 2) expanded delivery of evidence-based best practice care, and 3) a new paradigm for team-based interdisciplinary professional development. It contributes to these three areas by using its model of case-based, iterative learning in an environment employing technology to support inter-disciplinary community clinicians in provision of quality care for patients with chronic, complex diseases.

The research highlighted that clinicians under the ECHO model develop more confidence in their ability to provide safe and effective care, thereby validating their role and gaining peer appreciation within a community of clinicians who are dedicated to improving care for complex patients. Ongoing education and development contribute to a feeling of professional satisfaction that has promoted retention in rural and underserved communities that otherwise offer limited opportunities for professional engagement.

Dr Arora further demonstrated in his research that the technology used in ECHO is an effective utility in educating clinicians through co-managed care of rural and underserved patients throughout the state. The geographic isolation of many communities in New Mexico precludes ongoing on-site professional education or consultation. While there are a variety of educational programs and media available, most online venues do not involve face-to-face interactions with colleagues and do not address their professional isolation. ECHO focuses on the needs of community clinicians and underserved patients in supporting best practice care for complex patients, while meeting the larger societal need to better address expensive chronic diseases growing at unsustainable rates.

Taking the study further, Dr Arora was able to measure the impact of the ECHO model on patients. In fact, the results of a prospective cohort study, demonstrated that treatment for HCV using the ECHO model is as safe and effective as treatment at an Academic Medical Center (AMC). These findings were published in the New England Journal of Medicine in June 2011.

This article compared treatment of HCV at UNMHSC HCV clinic to treatment by primary care clinicians at 21 ECHO sites in rural areas and prisons in New Mexico. A total of 407 treatment naive patients with chronic HCV were enrolled. The outcomes showed that treating a complex disease such as HCV using the ECHO model has similar effectiveness as treatment at an AMC such as UNMHSC. ECHO represents a needed change in the conventional paradigms of AMCs where specialist care is only available in urban areas.

## **Outcomes From Early Studies Of Echo**

Feedback from ECHO participating clinicians:

- 97% said they had an enhanced knowledge about management and treatment of patients
- 98% said they achieved competence in caring for patients

How participants rated the impact of Project ECHO® (4.3-4.9/5):

- Diminished my professional isolation
- Enhanced my professional satisfaction
- Collaboration among agencies in Project ECHO® benefited my clinic
- Gave me expanded access to HCV treatment for patients in my community
- Gave me access to specialist expertise and consultation for myself and my clinic

Results on institution vs. rural treatment are nearly equal:

- 57.5% of patients treated at the UNM HCV clinic had a sustained viral response
- 58.2% of those treated at ECHO sites had a sustained viral response

An estimated 5 Million patients have been treated under the ECHO mentoring model to date.

## **Expansion**

Over time, the flexibility and efficacy of the model for use outside the health sector became apparent. One of the first non-medical applications for ECHO was started in 2013 at the Wyoming Institute for Disabilities (WIND) at the University of Wyoming. WIND adapted the model to support educators in helping students who need assistive technologies. They have continued to expand their programs to include numerous areas of education, addressing emergent and ongoing needs to improve students' educational and post-educational outcomes, and has resulted in bringing innovative education to thousands of educators, service providers, and families throughout the world. See Appendices A & B for a full list of ECHO programs.

Other adopters of the ECHO model for education include Ambience Public School and Oakridge International School in India (now growing to serve all of India, 2015); New Mexico Public Education Department (statewide program, 2017); and Denver University, Morgridge College of Education in Colorado (statewide program, 2018). There is a rapidly increasing number of institutions moving toward adoption. In India there are nine successful education programs including literacy, math, English, storytelling, and preventive health.



"This ECHO session ... was very informative. We conducted the activity 'Read and Draw' and came to know how many children could read & comprehend. The children really enjoyed the activity, and the results were amazing!"

-Manjul Sahni, English Teacher, DPS, Gurugram, India

The New Mexico pilot of ECHO for Education was completed in May 2018. The goal was to provide rural teachers access to the knowledge and support they need to help their students graduate high school by having clear pathways to their career goals. It was so successful that New Mexico will be continuing this program and adding two more education programs this fall (2018) – one to support strong teacher/training pathways and one to train K-12 teachers in an Early Warning System.

The Morgridge College of Education at University of Denver has just launched an ECHO program addressing educational disparities in rural and underserved communities. The program will focus on helping teachers build the skills to meet the care and learning needs of children with special needs and challenging behaviors in order to increase the opportunities for inclusion for all children across the state.

Another innovation of the model having tremendous impact started with the New Mexico Peer Education Project (PEP) for Prisoner Health and is now being adopted by Indiana and Tennessee state institutions. Prisons are high risk environments for the transmission of blood borne viruses including Hepatitis C. Health education for prisoners offers an opportunity to establish disease control both within and outside the prison community.

The PEP pilot was launched in 2009 in collaboration with the New Mexico Department of Corrections and the New Mexico Department of Health. A unique and powerful piece of this program is that inmates are chosen by the wardens at each prison but their participation is voluntary. Those who become peer educators successfully complete a 40 hour training on specific health topics and facilitation skills. They then conduct 10 hour interactive health education workshops for their peers.

The peer educators not only learn about key health topics but also about harm reduction, motivational interviewing & behavior change, and build skills in public speaking. In addition to decreasing the spread of infectious disease in NM prisons, the educators increase their job readiness with their new skills. The program provides high quality health education to a large number of inmates in a short period of time because peer educators have a unique capacity to deliver factual, relevant information to their peers.



"If Project ECHO and PEP hadn't given me a chance, I don't know where I'd be today. Instead, I'm part of a community, where I help people see how they can do better, both for themselves and for the world."

-Carissa McGee, former Peer Educator, now running her own non-profit to help inmates transition to life on the outside.

Each of these new Project ECHO programs continues to demonstrate the need, strength and impact of the ECHO model.

# Replication

Replication of the ECHO model is achieved through stages. Individuals or institutions interested in becoming ECHO partners start by learning more about the ECHO Model. The initial step of this can be done through a virtual introduction held once a month. For a deeper experience, interested parties attend a day long orientation at the ECHO Institute in Albuquerque.



July 19th, 2018 Replication Group

Once serious interest has been established, partnership documents are signed. These include ECHO's Statement of Collaboration for Replicating Partners and the Intellectual Property Terms of Use Agreement. Next partners send an implementation team to a three-day face-to-face training that includes operations and best practices for implementation.

Participants are versed on spoke recruitment and retention, curriculum development, hub IT

best practices, use of iECHO and Zoom, evaluation tools, and other topics relevant to the partners' interests.

Each new partner is given the knowledge and technology they need to start their own ECHO programs. The ECHO institute has negotiated a worldwide license with Zoom, a teleconferencing platform, that is in effect until December 31, 2025. This platform is shared with all ECHO replicating partners. No partner will be denied support services by the ECHO institute, however for those who can pay for the support, it is welcome. Partners cover the costs of running their ECHO programs at their institutions.

Once established, ECHO partners receive dedicated technical assistance from a replication account representative at the ECHO Institute. This person helps partners achieve their goals by answering questions, connecting to relevant resources, and providing technical assistance. The relationship is on-going from initial implementation and beyond.

To further support replication, Project ECHO recently launched a new program which creates Superhubs. A Superhub is an independent organization that can train and support new hubs in the ECHO model, while maintaining fidelity from the main Institute.

## **Echo Hubs And Superhubs: United States and Globally**

To date, the ECHO Institute supports 205 Hubs and 12 Superhubs, in addition to 7 dedicated US DoD Hubs and 9 US VA Hubs, impacting communities in 32 countries.



## **Funder Support For ECHO**

To date, the ECHO Institute has received approximately \$100 million in funding for its expansion throughout New Mexico, the US and the world from the following agencies and philanthropic funders:

## Federal government support

## Department of Defense / Defense Health Agency

The U.S. Department of Defense (DoD) has supported Project ECHO since 2012. Initial work was to replicate the Chronic Pain and Headache Management TeleECHO Clinic throughout the Army and then the Navy. The current work supports the Defense Health Agency (a joint, integrated Combat Support Agency that enables the Army, Navy, and Air Force medical services to provide a ready medical force to Combatant Commands in both peacetime and wartime) to replicate ECHO for other chronic conditions throughout the armed forces.

### Health Resources and Services Administration (HRSA)

<u>HRSA</u> funds the use of the ECHO model to address autism, epilepsy, and most recently opiate use disorder and perinatal hepatitis B. The autism, epilepsy and opiate disorder work all fund multiple ECHO hubs to address these chronic conditions across the country.

## Centers for Disease Control and Prevention (CDC)

CDC supports Project ECHO on several fronts. They support work that enhances linkage to care and treatment for people living with HCV including a consortium of ECHO HCV hubs that collaborate to share resources, exchange best practices, and pursue collaborative research. CDC support the Good Health and Wellness in Indian Country program which uses the ECHO model to bring together the 23 American Indian / Alaskan Native tribal organizations that have received funding through the initiative. There are also several initiatives where Project ECHO collaborates with the CDC to implement HIV ECHOs in countries supported by the President's Plan for AIDS Relief (PEPFAR).

## Agency for Healthcare Research and Quality (AHRQ)

<u>AHRQ</u> was the first outside organization to provide Project ECHO financial support. Grant support in 2004, was used to help to establish the first teleECHO clinic. Since then, AHRQ has provided additional support to expand ECHO's infrastructure and to pilot a hepatitis C health IT improvement project. Currently, AHRQ is funding multiple hubs to increase medication assisted treatment for substance use disorder.

## Substance Abuse and Mental Health Services Administration (SAMHSA)

<u>SAMHSA</u> has provided funding to ECHO for the development of the Fundamentals of Addiction Medicine ECHO, which is focused on increasing access to addiction medicine throughout the country.

## Centers for Medicare & Medicaid Services (CMS)

<u>CMS</u> supported a Complex Care program called ECHO Care. ECHO Care is an innovative program designed to improve access to primary and specialty care for patients with complex needs while also reducing the cost of care by utilizing a multidisciplinary team-based approach. They also support the use of the ECHO model in quality improvement efforts through their Quality Improvement Organizations to address issues such as improving care transitions, optimizing patient flow, and improving treatment of depression and alcohol use disorder.

#### Indian Health Service (IHS)

IHS funds Project ECHO to support IHS, Tribal and Urban Indian Health Center providers via teleECHO clinics in hepatitis C (HCV), HIV, tuberculosis (TB) and rheumatology. The HCV teleECHO clinic and one-day in person training is one of only two services that provide training or support for clinicians in Indian Country which has a high burden of HCV. The IHS TB clinic is a successful collaboration between the US government, the Navajo Nation and the New Mexico and Arizona State Departments of Health.

### Office of the Assistant Secretary for Preparedness and Response (ASPR)

<u>ASPR</u> has provided initial funding to use the ECHO model in supporting the response to the Zika virus in Puerto Rico. They are hoping to build upon this experience to see how they can leverage the ECHO model to build and maintain an on-going emergency readiness platform as future public health emergencies and disasters arise.

## State government support

#### New Mexico State Legislature

The State of New Mexico Legislature has supported Project ECHO since 2006, to help expand the reach of the ECHO model in New Mexico and to enhance statewide access to state-of-the-art care for specialty diseases including hepatitis C, diabetes, chronic pain, integrated addictions and numerous other disease areas. Project ECHO has also received funding to develop new Community Health Worker Programs.

### New Mexico Department of Health

<u>The New Mexico Department of Health</u> has supported Project ECHO since 2006, to enhance statewide access to leading-edge hepatitis C treatment and more recently HIV management via the ECHO model for case-based learning and specialized disease consultation.

#### New Mexico Medicaid

<u>Centennial Care</u>, New Mexico's Medicaid program, has provided support through its Managed Care Organization partners to Project ECHO to provide access to Medicaid providers throughout the state to best practice care and learning across a number of chronic conditions.

#### Albuquerque Area Indian Health Board

The Albuquerque Area Indian Health Board supports Project ECHO in the development of a Diabetes and Cardiovascular curriculum for Community Health Representatives. The curriculum has been developed with cultural adaptations for the Native American Community Health Representatives in 17 tribes in New Mexico. Four Cohorts have been trained and a refresher course will be developed for all the graduates of past cohorts. A continuing education track is in development to allow past graduates to gain ongoing support and meet the requirements of obtaining continuing education credits to maintain their Community Health Worker State Certification.

#### New Mexico Department of Corrections

<u>The New Mexico Department of Corrections</u> supports Project ECHO to guide their medical contractors in the treatment, care and management of people incarcerated living with hepatitis C. The New Mexico Corrections Department identifies individuals requiring treatment and presents their cases in a closed TeleECHO clinic used solely for these patients.

## Philanthropic support

#### General Electric Foundation

The GE Foundation initially supported Project ECHO with a grant to develop a program called ECHO Access, which is a new model for integrating behavioral health care with primary care. ECHO Access trains teams of nurse practitioners/physician assistants and community health workers to screen for, diagnose, and treat mental illness and substance use disorders in community health centers across New Mexico. GE expanded their support for ECHO with a significant award to support the replication of the ECHO model across the United States with a particular focus on serving Federally Qualified Health Centers.

#### Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation funded ECHO to strengthen and expand the model within New Mexico and to pilot its replication outside of the state. Building upon that support, in 2013, the Foundation provided a grant to develop Project ECHO's capacity to rapidly expand replication efforts nationally.

#### The Helmsley Charitable Trust

<u>The Helmsley Charitable Trust</u> has supported Project ECHO with a grant to develop a new program called Endocrinology ECHO, which addresses the widespread need for greater access to complex diabetes care and specialized endocrinology treatment, especially among publicly-insured and uninsured patients.

## Bristol Myers Squibb Foundation

<u>The Bristol Myers Squibb Foundation</u> supports Project ECHO to bring top-quality care to cancer patients living in rural and underserved areas where cancer specialists are not readily available and to improve cancer health outcomes by connecting doctors at National Cancer Institute-designated Comprehensive Cancer Centers and other academic medical centers with those in community hospitals and health centers.

#### Merck Foundation

<u>The Merck Foundation</u> supports Project ECHO to significantly improve access to care throughout India and Vietnam by increasing the replication of the ECHO model across many chronic conditions. The work will also support the use of the ECHO model to train local versions of Community Health Workers as the front-line and most accessible workforce for many conditions.

#### Vijay and Marie Goradia Charitable Foundation

The Goradia Charitable Foundation supports ECHO Institute efforts in India and the ECHO India superhub. The overall goal is both to expand access to care and to demonstrate to the government of India and regional state governments the utility of adopting the ECHO model as a cost-effective way to expand access to needed services for underserved populations throughout India.

#### • Liver Institute and Foundation for Education and Research (LIFER)

The Liver Institute and Foundation for Education and Research (LIFER) provides support to Project ECHO to train leading hepatitis experts in the country of Georgia to develop their own ECHO Hepatitis C TeleECHO clinics with the goal to expand treatment access to Georgian citizens. This project is a component of the world's first hepatitis C elimination project and is a collaborative project with the Center for Disease Control and Prevention. Georgia now has two Project ECHO Hubs, with over 18 spokes and plans to expand further in the coming years.

## **Past**

#### • U.S. Department of Veterans Affairs

The U.S. Department of Veterans Affairs worked with Project ECHO in a nationwide pilot program called Specialty Care Access Network-Extension for Community (SCAN-ECHO). SCAN-ECHO enabled specialty care teams in areas such as diabetes, pain management, and Hepatitis C to connect with veterans' local primary care providers and Patient Aligned Care Teams to increase access to specialty care services for veterans in rural and medically underserved areas. They have continued to run SCAN-ECHO throughout the VA network.

## National Institute on Drug Abuse (NIDA)

NIDA has supported Project ECHO with grants for the ECHO model to disseminate NIDA/ Clinical Trials Network (CTN) buprenorphine blending trainings and to promote physician prescribing of buprenorphine in the primary care setting. Buprenorphine also known as suboxone is FDA approved for the use in opioid addiction treatment.

#### McCune Charitable Foundation

The McCune Charitable Foundation has supported Project ECHO with grants to aid the Prisoner Peer Educators program which trains and supports prisoners to education fellow prisoners on hepatitis C and other specialty disease areas. They also provided further funding to support Community Health Workers throughout New Mexico through the development of a large data plan to aggregate data.

#### Con Alma Health Foundation

<u>The Con Alma Health Foundation</u> has supported Project ECHO with grants to aid the Prisoner Health is Community Health: A Peer Education Program in New Mexico. This program trains and supports prisoners in educating fellow prisoners on hepatitis C and other specialty disease areas.

#### US Mexico Border Health Commission

<u>The Border Health Commission</u> funds Project ECHO to create a TB teleECHO clinic for the US and Mexico states along the border to discuss bi-national TB cases. This will be the first bi-national ECHO and will include simultaneous translation.

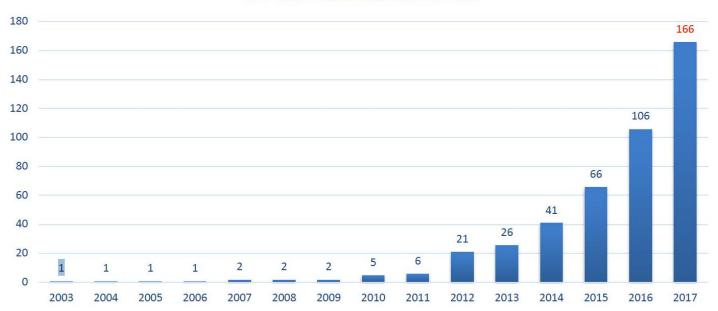
## **Project Echo's Arrival Point**

Dr Arora's Project ECHO is changing the way medical, public health and other expert knowledge flows. ECHO will continue to transform global systems for sharing knowledge through participatory education. And, in doing so, **improve the lives of one billion people**, 850 million of them in lowand middle-income countries.

One billion is a staggering number—but the ECHO model is inherently suited to achieving this kind of magnitude, its open platform and expansion model make it readily scalable. It addresses health concerns which affect billions of people, produces tangible outcomes not only for patients but also for providers and whole populations and systems. ECHO is already very popular with users across the world, and it achieves its lasting impact by effectively transferring knowledge that often already exists. The ECHO model embodies the maxim that knowledge is power—in this case, the power to improve lives and reduce suffering on a massive scale.

Project ECHO has seen a rapidly increasing demand for its model. A key measure is the creation of ECHO hubs—regional centers where the multidisciplinary teams of subject matter experts are located. Between 2013 and 2017, the number of hubs grew at an average annual rate of over 50 percent, with the highest growth rates outside the US.

## **US and International Hubs**



## **Credible Pathway**

Project ECHO is implementing a well-researched strategic plan to reach its ambitious arrival point of touching one billion lives over the next seven years. There are four core initiatives to assure success of this goal.

# Strategic Initiative #1: Pursue growth focused on significant health concerns that are a strong fit with the ECHO model

By collaborating closely with national and regional leaders, as well as examining data on the global burden of disease, ECHO has identified 10 core health conditions that are highly prevalent and well-aligned with the ECHO Model: pain, viral hepatitis and other liver diseases, uncontrolled hypertension, diabetes, chronic respiratory disease, mental health disorders, substance abuse disorder, active tuberculosis, HIV, and cancer.

Additionally, innovations with the ECHO model have shown that it works well at distributing knowledge on broader health topics. It is being deployed to improve care coordination and laboratory medicine. Improving healthcare systems is a significant part of reaching ECHO's goal.

Lastly, through other topics related to health and wellbeing including education, sanitation, accessible water, and the environment, Project ECHO will expand its reach to ensure meeting its goal.

## Strategic Initiative #2: Achieve global scale

Project ECHO will reach its full potential and sustainability through continued and new partnerships with leading global health organizations, such as the Centers for Disease Control, the World Health Organization, and the World Bank. By embedding the ECHO model into the infrastructures of these organizations, their networks, and their menu of solutions, ECHO will continue to create strong evidence for scale and ultimately reach many more lives than it would acting independently.

Additionally, working with government health infrastructures will allow the ECHO model to become the new normal in knowledge sharing. Asia and Sub-Saharan Africa are near-term priorities, and success is already being seen with embedding the ECHO model into national and state health infrastructures, focusing on the most critical local needs and topics. As example:



First session of a new TB-HIV ECHO program led by the India National Institute of TB and Respiratory Disease

High-level government officials in India are enthusiastic about using the ECHO model to support nationwide tuberculosis elimination and building health systems capacity for emergency response. The Africa CDC now holds weekly ECHO sessions with representatives from the Ministries of Health of many countries in East, Central, and Southern Africa to facilitate learning and the rapid exchange of information about public health emergencies, with plans to expand.

ECHO has opened an office in India which serves as a regional catalyst. There are plans to open others in additional countries and regions where Project ECHO currently lacks an established presence. These offices, which will be closely connected to the ECHO Institute, will develop and deepen partnerships with governments and local infrastructure while training local hubs to run ECHO programs.

As global presence matures, ECHO will expand regional catalysts by training additional Superhubs. Powered by local institutions and organizations, new Superhubs will build local Project ECHO influence and champions, spread the ECHO model through regional networks, and ensure that programs are tailored to the local environment.

## Strategic Initiative #3: Develop the ECHO Digital Platform

The ECHO model is powerful, but current methods of replication and support are not enough to drive and sustain the projected growth over the next seven years. ECHO is committed to reimagining all aspects of training through digital platforms. This will reduce the human and financial costs by enabling a much broader community of creators outside the hubs to contribute knowledge and tools to the movement.

ECHO Digital is a core element of the strategy, and empowers and accelerates the other initiatives. It will augment, *though not replace*, human interaction in five functions:

- 1. attracting new partners
- 2. engaging new participants efficiently and effectively
- 3. supporting operations with core tools and knowledge
- 4. providing data to assess impact and spread the word about the ECHO model
- 5. supporting a community of innovators across the world

## Strategic Initiative #4: Support expansion of the ECHO Institute NM

The ECHO Institute, currently housed at UNMHSC, both runs its own teleECHO programs in service to the people of New Mexico as well as support replication efforts around the globe by training hubs and Superhubs. This means that people at the Institute tasked with expansion, remain grounded in ECHO practice. Therefore, the Institute plays a vital role in its growth strategy moving forward, functioning as a central resource for propagation and innovation. As these two activities synergize, tremendous innovation occurs within the ECHO programs at the Institute at the same time that lessons learned inform replication training and these are shared with the global community.

# **Positioning For Expansion**

To strengthen and evolve Dr. Arora's vision, the ECHO Institute is building the needed staff, capacities, and processes to execute these strategic initiatives. To do this, ECHO is first cultivating a strong, values-based work culture to attract the best people by investing in the areas of communications, policy, and evaluation - each play critical roles in its expansion. Second, ECHO is increasing efforts to develop more sustainable funding streams to support the ECHO Institute and the wider ECHO movement. Third, the ECHO Institute will gain a greater degree of autonomy from UNM, adopting a new governance structure that enables it to support a global movement while continuing to leverage university resources. Lastly, ECHO will create an Advisory Board to guide and support this strategic work.



Project ECHO – Democratizing knowledge to touch 1 BILLION Lives by 2025!

# **Appendix A – United States ECHO Partners**

State	Name	Focus (Specialty)
Alabama	University of Alabama at Bir- mingham	Autism
Alaska	Alaska Native Medical Center of Alaska Native Tribal Health Consortium	Palliative Care
	University of Alaska Anchorage - Alaska's University Center of Excellence for Disabilities	Autism, Traumatic & Acquired Brain Injury
	Maniilaq Association	Addiction Medicine Integrated Addictions and Psychiatry
Arizona	Health Choice Integrated Care, LLC	Medication Assisted Treatment
	St. Joseph's Hospital and Medical Center	Hepatitis C
	University of Arizona	Rheumatology
Arkansas	Arkansas Children's Research Institute Hospital	Autism
California	International Liver Centers Foundation	Hepatitis C, Liver Care, Liver Disease Management, Liver Diseases
	University of California Davis	Pain Management
	University of California-Irvine	Autism
	LA Net	Geriatrics
	University of California, Los Angeles	Substance Use Disorders
	Veteran Affairs-Los Angeles	Chronic Disease Prevention and Management, Chronic Pain
	Children's Hospital of Oakland	Sickle Cell Disease
	Navy Medicine West- Naval Medical Center	Chronic Pain
	Veteran Affairs-San Diego	Chronic Disease Prevention and Management, Chronic Pain
	University of California San Francisco Medical Center	Hepatitis C
	Veteran Affairs-San Francisco	Chronic Pain
Colorado	University of Colorado School of Public Health - Anschutz Medi- cal Campus	Behavioral/Mental Health, Cancer Survivorship, Care Coordination, Child Abuse, Epilepsy, Food Safety, Hepatitis C, Neurology, Pediatric Complex Care, Tuberculosis/TB
	Veteran Affairs-Eastern Colora- do	Chronic Pain

Connecticut	Hartford Health and Human Services	Hepatitis C
	Community Health Center, Inc.	Behavioral/Mental Health, Chronic Pain, Complex Care, Hepatitis C, HIV, Opioid Ad- diction - Buprenorphine, Pediatrics, Quality Improvement
	Yale University	Child Abuse
	Veteran Affairs-Connecticut	Chronic Pain
District of Columbia	School-Based Health Alliance	Adolescent Health
Georgia	American Academy of Pediatrics Georgia Branch	Endocrinology/Diabetes, Pediatrics
	American Cancer Society, Inc.	Lung Cancer
	Centers for Disease Control and Prevention	Sexually Transmitted Diseases
	Children's Healthcare of Atlanta	Child Abuse, Child Advocacy
Hawaii	Army - Regional Health Com- mand- Pacific	Chronic Pain
	University of Hawaii	Behavioral/Mental Health, Endocrinology/Diabetes, Geriatrics
Idaho	University of Idaho	Addiction Medicine
Illinois	Southern Illinois University	Hypertension, Opioid Use Disorder
	University of Chicago	Behavioral Health Integration: Common Psych Issues in Primary Care, Behavioral Health Integration: Systems Collaborative Care, Childhood Obesity and Comorbidities, Complex Pediatric Asthma, Geriatrics, Geriatrics in Skilled Nursing Facilities, Hepatitis C, Hepatitis C Case Management & Clinic Capacity Building, Hospital Complex Care, Opioid Use Disorder, Pediatric ADHD, Resistant Hypertension, Risk Based Approach to Women's Health, Serious Mental Illness
	American Academy of Pediatrics	Environmental Health, HPV, Zika
Indiana	Indiana University	Substance Use Disorders
	Indiana University-Purdue University Indianapolis Fairbanks School of Public Health	Hepatitis C, Primary Care
Iowa	Primary Health Care	Behavioral/Mental Health

Kansas	University of Kansas Medical Center	Education - Problem Behaviors/Summer School, Opioid Use Disorder, Pulmonary Fi- brosis
Kentucky	International Gynecologic Cancer Society	Gynecologic Cancer
Louisiana	Dyslexia Resource Center	Dyslexia
	Ochsner Health System	Liver Care, Liver Disease Management, Liver Diseases, Rheumatology, Transplants
Maine	Maine Quality Counts dba N. New England Network	Addiction - Compassionate Tapering, SUD & Perinatal Exposure
	MaineHealth	Autism, Endocrinology/Diabetes
Maryland	Johns Hopkins University	Sickle Cell Disease
	Kennedy Krieger Institute	Behavioral/Mental Health, Developmental Disabilities
	National Cancer Institute Center for Global Health	Cancer Control Planning, Cervical Cancer Prevention
	Univ. Research Co., LLC - Center for Human Services	Quality Improvement, Tuberculosis/TB, Zika
Massachusetts	Beacon Health Options	Opioid Medication-Assisted Treatment
	Boston Medical Center	Addiction Medicine Opioid Addiction - Buprenorphine
	Fenway Health	Transgender Health
	Harvard Beth Israel Deaconess Medical Center	Gerontology
	Joslin Diabetes Center	Endocrinology/Diabetes
	Partners HealthCare	Substance Use Disorders
	Lurie Center for Autism	Autism
	UMass Memorial Medical Group	Hepatitis C, Medication Assisted Treatment
Michigan	University of Michigan	Headaches
	Veteran Affairs- Ann Arbor	Chronic Pain
	MNI Great Lakes	Bone Health
Minnesota	Catholic Health Initiatives St. Gabriel's Health	Opioid Use Disorder
	Hennepin Healthcare System, Inc.	Addiction Medicine, Hepatitis C
	University of Minnesota	Pediatric Dental Health
	Wayside Recovery Center	Addiction Medicine
Missouri	Missouri Telehealth Network	Asthma, Asthma Care Accelerator, Autism, Child Psychiatry, Chronic Pain, Community Health Worker, Dermatology, Healthcare Eth- ics, Hepatitis C, Multi-Tiered System of Sup- ports, Opioid Use Disorder

Montana	Billings Clinic	Integrated Behavioral Health, Mental Health & Addictions, Opioid Addiction Treatment, Pediatric Mental Health, Trauma-Informed Care (Youth)
Nebraska	Children's Hospital & Medical Center in Omaha	Childhood Obesity
Nevada	University of Nevada	Antibiotic Stewardship, Behavioral/Mental Health, Endocrinology/Diabetes, Gastroen- terology, Pain Management, Rheumatology, School Based Mental Health, Special Series, Sports Medicine
New Jersey	Trinitas Regional Medical Center	Developmental Disabilities, Intellectual and Developmental Disabilities
	Robert Wood Johnson Partners/ Rutgers	Autism, Endocrinology/Diabetes, Pediatrics
New Mexico	Family Voices	Community Health Worker
	HealthInsight	Quality Improvement
	New Mexico Office of the Medical Investigator	Grief Counseling, Medicolegal Death Investigations
	Parents Reaching Out	Developmental Disabilities, Parent Advocacy
	Presbyterian Health Services	Motivational Interviewing, Pain and Addictions
	University of New Mexico (UNM)	Behavioral/Mental Health, Bone Health, Child Abuse, Children and Youth Epilepsy, Chronic Disease Prevention and Management, Chronic Pain, Community Health Worker, Complex Care, Correctional Facility, Endocrinology/ Diabetes, Epilepsy, Hepatitis B, Hepatitis C, HIV, IHS - HCV, IHS - HIV, IHS - Rheumatology, IHS - Tuberculosis, Integrated Addictions and Psychiatry, Opioid Addiction - Buprenorphine, Primary Care, Quality Improvement, Rheumatology, Tuberculosis/TB, Women's Health
	UNM Carrie Tingley Hospital	Cognitive Rehabilitation
	UNM: Envision	Obesity, Pediatric Nutrition, Pediatrics, Pulmonary/Asthma
	New Mexico Public Education Department College and Career Readiness Bureau	Education
	UNM - Center for Development and Disability	Autism
New York	Better Health for Northeast NY	Asthma
	Clinical Education Initiative	HIV, Sexually Transmitted Diseases
	ICAP Columbia University South Sudan	HIV
	LiveOnNY	Organ Donation

New York	NYC Health +Hospitals Corp.	Addiction Medicine, Buprenorphine - Opioid Use Disorder, Opioid Use Disorder, Pediatric Sickle Cell
	University of Rochester Medical Center	Autism, Behavioral/Mental Health, Eating Disorders, General Psychology, Geriatric Mental Health in Primary Care, Geriatrics, Long Term Care, Palliative Care, Sexually Transmitted Diseases
	Western New York Collaborative	Chronic Pain, Opioid Addiction - Buprenor- phine
	SUNY Upstate Medical University	Pediatrics
	Center for Regional Healthcare Innovation, LLC (Westchester Medical Center Health Network)	Behavioral Health Integration
North Carolina	Mountain Area Health Education Center	Chronic Pain, Primary Care, School Nurses
	University of North Carolina at Chapel Hill	Opioid Medication-Assisted Treatment
	Four Seasons Compassion for Life	Palliative Care
	Army - Regional Health Com- mand- Atlantic	Chronic Pain
	Partnership for Community Care Network	Substance Abuse in Pregnancy
	Wake Forest University Baptist Medical Center	Bone Health
North Dakota	Univ. of North Dakota School of Medicine & Health Sciences	Addiction Medicine
Ohio	Cincinnati Children's Hospital Medical Center	Autism, Depression, Sickle Cell Disease
	University of Cincinnati	Chronic Pain
	Veteran Affairs-Cleveland	Chronic Pain
	Ohio Medical Directors Association	Geriatrics
	Northeast Ohio Medical Center dba 'NEOMED: Ohio Alliance	Community Health (AmeriCorps HPAC Assistance), Community Health Worker, Education for Service, Integrated Care, Opioid Use Disorder, Schizophrenia & Complex Psychosis
Oklahoma	University of Oklahoma Health Sciences Center	Hepatitis C, HIV, Oral Health
	Cherokee Nation Hastings Hospital	Hepatitis C
	Oklahoma State University - Center for Health Sciences	Addiction Medicine, HIV & Viral Disorders, Obesity, Pediatric Behavioral and Emotional Health, Psychiatry, Educational Development

Oregon	Northwest Portland Area Indian Health Board	Endocrinology/Diabetes, Hepatitis C
	Oregon Health & Science Uni-	Addiction Medicine, Liver Care
	versity	Nursing Facility Behavioral Health
	Veteran Affairs-Portland and Puget Sound	Chronic Pain
Pennsylvania	Children's Hospital of Philadel- phia	Autism
	University of Pittsburgh	Autism
South Carolina	Medical University of South Carolina	Addiction Medicine, Hepatitis C
	Greenville Health System	Mental Health - Medical Home
Tennessee	4 Breath 4 Life	Primary Care
	East Tennessee State University	Epilepsy
	Vanderbilt University Medical Center	Autism
Texas	Migrant Clinicians Network	Ambulatory Healthcare, Zika
	TMF Health Quality Institute	Behavioral/Mental Health
	Army - Regional Health Com- mand - Central	Chronic Pain
	Baylor St. Luke's Medical Center	Cardiology, Hepatitis B, Hepatitis C, Infectious Disease, Liver Diseases, Pulmonary
	University of Texas MD Anderson	Breast Cancer, Cancer Hematology, Cancer Pharmacy, Cancer Survivorship, Cervical Cancer, Cervical Cancer Prevention, Early Diagnosis of Melanoma, Head and Neck Cancer, Palliative Care, Tobacco Cessation
	United States Air Force Diabetes Center of Excellence	Endocrinology/Diabetes
Utah	Intermountain Healthcare	Liver Disease Management
	University of Utah Health	Behavioral/Mental Health, Burn and Soft Tissue Injury, Child Abuse, Child Advocacy, Chronic Pain, Domestic Violence, Gastroenterology, Headaches, Hepatitis C, High Risk Obstetrics, Human Trafficking and Sexual Assault, Immune Disorders of the Gut, Inter-professional Education, Internal Medicine/ Pediatrics Residency, Liver Care, Liver Diseases, Nursing, Patient Abuse, Post-Partum Hemorrhage, Pregnancy
Vermont	University of Vermont	Chronic Pain
Virginia	National Osteoporosis Foun- dation - National Bone Health Alliance	Bone Health

Virginia	University of Virginia Medical Center	Vascular Medicine
	Navy Medicine East- Naval Medical Center	Chronic Pain
	Veteran Affairs-Richmond	Chronic Pain
	Virginia Commonwealth University	Opioid Case Management
Washington	University of Washington	Antibiotic Resistance, Cognitive Behavioral Therapy - Psychosis, First Episode Psycho- sis, Geriatrics, Heart Failure, Hepatitis C, HIV, Public Health, Tuberculosis/TB
	Washington State Department of Health	Tuberculosis/TB
West Virginia	Charleston Area Medical Center	Cancer Survivorship
	Marshall University	Endocrinology/Diabetes
	West Virginia Clinical and Translational Science Institute - of West Virginia University	Chronic Lung Disease, Chronic Pain, Endo- crinology/Diabetes, Hepatitis C, HIV, Medica- tion Assisted Treatment, Psychiatry
Wisconsin	University of Wisconsin School of Medicine and Public Health	Pediatric Emergency Care
	Wisconsin Department of Health Services	Opioid Use Disorder
Wyoming	University of Wyoming	Assistive Technologies in Education, Autism, Behavioral Support, Behavioral/Mental Health, Career Development, Early Childhood, Educational Leadership, Geriatrics, Rural Care Transitions, School Leadership, Secondary Transition, Student Health, Waiver Services

# **Appendix B – Global ECHO Partners**

Country	Name	Focus (Specialty)
Argentina	Universidad Austral	Hepatitis C
	Hospital Britanico de Buenos Aires	Gastroenterology
	Hospital Italiano	Hepatitis C, Liver Care
	Institute of Oncology Angel H. Roffo	Head and Neck Cancer
	Instituto Alexander Fleming	Colorectal Cancer
	Instituto de Rehabilitacion Psicofisica de Buenos Aires	Pulmonary
	OSFE - Obra Social Ferroviaria	Rheumatology
	Hospital Eva Peron	Pulmonary
Australia	Liverpool Hospital	Hepatitis C
	Children's Health Queensland Hospital and Health Service	Child Development, Childhood Obesity, Pediatric ADHD, Refugee Health

Brazil (Brasil)	Hospital de Clinicas de Porto Alegre	Hepatitis C
Canada	University of Alberta	Autism
	Lair Centre	Hepatitis C
	Children's Hospital of Eastern Ontario	Pediatrics, Psychiatry
	Baycrest Centre for Geriatric Care	Geriatrics
	Centre for Addiction and Mental Health	Addiction Medicine Psychosocial Interventions, Behavioral/Mental Health, First Nations, Inuit and Metis Wellness
	Holland Bloorview Kids Rehabilitation Hospital (ATN Site)	Autism
	The Hospital for Sick Children (SickKids)	Pediatric Bariatric Care, Pediatric Complex Care, Pediatric Pain Management, Pediatric Palliative Care
	Ontario Epilepsy Network	Epilepsy
	University Health Network	Chronic Pain, Hepatitis C, Rheumatology
	Centre Hospitalier del Universite de Montreal	Hepatitis C
Côte d'Ivoire	Ministry of Health and Public Hygiene Côte d'Ivoire	HIV
Ecuador	Consorcio Ecuatoriano para el Desarrollo de Internet Avanzado (CEDIA) Ecuador	Endocrinology/Diabetes, Hypertension
Egypt (رصم)	Reaching You- Ministry of Health and Population	Cardiology, Hepatitis C, Pulmonary
Ethiopia	African Society for Laboratory Medicine	Laboratory
Georgia (საქართველო)	Georgian-French Joint Hepatology Clinic	Hepatitis C
	Mrcheveli - Georgia	Hepatitis C
	National Center for Tuberculosis and Lung Diseases	Tuberculosis/TB
Germany (Deutschland)	Army - Regional Health Command- Europe	Chronic Pain
India	State TB Office, Assam	Tuberculosis/TB
	Ambience Public School	Teacher Mentorship
	Holy Family Hospital	Cardiology, Neurology
	Institute for Cytology and Preventive Oncology / National Institute of Cancer Prevention and Research	Cancer Screening and Prevention
	Institute for Liver and Biliary Sciences	Liver Diseases

India	National Institute for Tuberculosis and Respiratory Diseases	HIV, Tuberculosis/TB
	Solidarity and Action Against The HIV Infection in India	Maternal and Child Health
	STDC Ahmedabad (State TB Training and Demonstration Centre for the State of Gujarat)	Tuberculosis/TB
	Ambience Public School Gurgaon	Education
	Karuna Trust	Maternal and Child Health
	National Institute for Mental Health and Neurosciences	Addiction Medicine, Behavioral/Mental Health, Integrated Addictions and Psychia- try, Opioid Addiction - Buprenorphine, Preg- nancy, Tobacco Cessation
	Tata Memorial Centre	Cancer, Cancer Clinical Trials
	Ummeed Child Development Center	Autism
	Trivandrum Institute of Palliative Sciences	Palliative Care
	Indian National Association for Study of the Liver	Hepatitis C
	Oakridge International School, Hyderabad	Education
	Pain Relief and Palliative Care Society	Palliative Care
	LV Prasad Eye Institute	Ophthalmology
Ireland	West/Northwest Hospitals Group	Endocrinology/Diabetes
	The Heartbeat Trust	Cardiology
	Royal College of Surgeons in Ireland	Rheumatology
Jamaica	Ministry of Health Jamaica	Chronic Disease Prevention and Management, HIV
Kazakhstan (Қазақстан)	Kazakh Medical University for Continuous Education	HIV
Kenya	Jaramogi Oginga Odinga Teaching & Referral Hospital Kenya	HIV
	National AIDS STI Control Program Kenya	HIV
	National Public Health Laboratory Services – Kenya	Antibiotic Stewardship
	Kenyan National Tuberculosis, Leprosy and Lung Disease Program Kenya	Tuberculosis/TB
	Academic Model Providing Access to Healthcare	Chronic Disease Prevention and Management

Kenya	Eastern Africa Regional Collaborat- ing Center - Africa CDC	Public Health
Kyrgyzstan (Кыргызстан)	Kyrgyz State Medical Institute of Postgraduate Education	HIV
Mexico (México)	Clinica Medica Internacional- Amor- Pro TB	Tuberculosis/TB
	Adizes Institute	Business Consulting
	Universidad Panamericana	Psychiatry
Myanmar (Bur- ma)	Ministry of Health and Sports, Myanmar	HIV
Namibia	Namibia Ministry of Health and Social Services	HIV, Quality Improvement
Nigeria	mDoc Healthcare	Quality Improvement
Pakistan (ناتسکاپ)	HealthNet	Hepatitis C, Hypertension & Chronic Kidney Disease
	Aga Khan University & Hospital	Hepatitis C
South Africa	Infection Control Africa Network	Infectious Disease
Tajikistan (Точикистон)	Tajik Institute for Postgraduate Education of Medical Staff	HIV
Tanzania	The Ministry of Health, Community Development, Gender, Elderly and Children - Tanzania	HIV
Thailand (□□□	Chiang Mai University	Behavioral Health of Chronic Diseases
Uganda	Uganda Virus Research Institute	HIV
United Kingdom	St. Luke's Hospice	Palliative Care
	Hospice UK	Building on the Best, Care Homes, Palliative Care
	Health and Social Care Board Northern Ireland	Dermatology, Endocrinology/Diabetes, Ophthalmology, Quality Improvement
	Northern Ireland Hospice	Palliative Care
	Highland Hospice	Care Homes, Nurse Specialist-Palliative Care, Out of Hours Practitioners, Palliative Care - Pharmacy
Uruguay	Universidad de la Republica	Autism, Cardiology, Cervical Cancer, Family and Community Medicine, Frequent Hematological Diseases, hepatitis C, HIV, Neurorehabilitation, Non-Communicable Diseases, Palliative Care, Pediatric Palliative Care, Systemic Autoimmune Diseases

Venezuela	Universidad Central de Venezuela	Pediatrics, Pregnancy
Vietnam (Việt Nam)	National Lung Hospital, Vietnam	Tuberculosis/TB
Zambia	Southern Africa Regional Collaborating Center - Africa CDC	Public Health

#### LINKS TO PRESS SAMPLES

https://www.vox.com/science-and-health/2018/7/31/17398914/opioid-epidemic-project-echo-new-mexico-addiction

https://www.statnews.com/2016/09/12/doctors-primary-care-specialists-project-echo/

https://opinionator.blogs.nytimes.com/2014/06/11/the-doctor-will-stream-to-you-now/

## **ADDITIONAL YOUTUBE by Dr. Arora**

https://www.youtube.com/watch?v=IY5nlJxac0g

# **CURRICULUM VITAE** Sanjeev Arora, MD, MACP, FACG

8/14/2018

PERSONAL DATA:

Office: The University of New Mexico Health Sciences Center

Department of Internal Medicine, MSC10 5550

2211 Lomas Blvd. NE Albuquerque, NM 87131

Telephone: (505) 272-2808, Fax: (505) 272-4628

e-mail: SArora@salud.unm.edu

Home address: 2316 Hannett NE, Albuquerque, New Mexico 87106

Date of Birth: September 22, 1956

Place of Birth: Nangal, India

Marital Status: Married: Madhu Arora, MD

**EDUCATION:** 

Jun 1974 Premedical, Maharajah's College, Jaipur, India Oct 1978 MD, Armed Forces Medical College, Pune, India

Internship:

10/78-01/80 Army Hospital, Delhi, India.

Residency:

01/80-01/81 Medicine, Safdurjung Hospital, New Delhi, India. Surgery, Maimonides Medical Center, Brooklyn, NY 07/81-06/82 Medicine, Sisters of Charity Hospital, State University of 07/82-06/85

New York, Buffalo, NY

Fellowship:

07/85-06/87 Gastroenterology, New England Medical Center, Boston, MA

ACADEMIC APPOINTMENTS:

Apr-Oct 2007 Acting Chair, Department of Internal Medicine, University of New Mexico Health

Sciences Center, Albuquerque, NM

Executive Vice Chair, Department of Internal Medicine, UNM HSC Jul 2004-2010

Jul 2002-2004 Vice Chair, Department of Internal Medicine, UNM HSC

Jul 2000-present Professor of Medicine, Department of Internal Medicine, UNM HSC

Jul 1998-2010 Director, Office of Clinical Affairs, Department of Internal Medicine, UNM HSC

Jul 1993-1998 Section Chief and Associate Professor of Medicine, Department of

Medicine, University of New Mexico

Jul 1987-1993 Assistant Professor of Medicine, Department of Medicine,

Tufts University School of Medicine, Boston, MA

**HOSPITAL APPOINTMENTS:** 

Jul 1997-1999 Chief of Medical Staff, University of New Mexico Health Sciences Center,

Albuquerque, NM

Jul 1993-Present Staff Gastroentologist, University of New Mexico Hospital, Albuquerque, NM

Jul 1987-1993 Staff Physician, Division of Gastroenterology, New England Medical Center,

Boston, MA

LICENSURE AND CERTIFICATION:		
1985	Massachusetts medical license #55062	
1985	American Board of Internal Medicine	
1987	American Board of Gastroenterology	
1993	New Mexico medical license #93-199	
1997	Masters in Medical Management, Tulane University	
1997	American Board of Medical Management	
1998	Certificate of Practice Management, The American College of Medical Staff Development	
1998	Certified Physician Executive – American College of Physician Executives	
	ND HONORS:	
2018	Albuquerque Meeting Hero Award to recognize efforts to keep Project ECHO events in New Mexico. Presented by Visit Albuquerque, Albuquerque, New Mexico	
2018	Northeast Ohio Medical University Award for Sanjeev Arora's vision, leadership and	
2017	support in multiplying the power to cure	
2017	Hepatitis Hero Award by the Viral Hepatitis Action Coalition (VHAC) to recognize	
	outstanding efforts that enabled two rural state-based programs in Arizona and Utah to	
	implement a Project ECHO-like model, successfully training 66 primary care clinicians,	
2017	predominantly from rural settings.	
2016	Presidential Award of Distinction, University of New Mexico	
2016	Recognition by the American College of Gastroenterology for 25 years of membership and longstanding involvement in the College.	
2015	Recognition by the Mary Anne Keshen & Family Charitable Trust for transforming Global	
2013	Healthcare. November 10, 2015. Society of Physician Entrepreneurs.	
2015	20 for 20 Honoree for contributions to improving Health Care in New Mexico for	
2013	the past 20 years. September 26, 2015, Health Action New Mexico	
2015	ABL – Innovations in Healthcare Leadership in Innovation Award	
2015	Performance Excellence Award, New Mexico Department of Health	
2013	New Mexico Community Health Worker Association, Inc. Lifetime Achievement	
2014	Award Advocating for the CHW Model.	
2014	Project ECHO highlighted in a New York Times Article, Opinionator Section,	
	under Fixes, "The Power to Cure, Multiplied" June 11, 2014.	
2014	Teresa Heinz and the Heinz Family Foundation 19th Heinz Award.	
2013	American Telemedicine Association (ATA) President's Award	
2013	Distinguished Professor at the University of New Mexico	
2013	Second Rosenthal Award from the Rosenthal Family Foundation, American College of	
	Physicians (ACP)	
2012	Excellence in Clinical Research Award, University of New Mexico Health Sciences Center	
2011	New England Journal of Medicine Article, "Outcomes of Treatment for Hepatitis C Virus	
	Infection by Primary Care Providers" named one of the Most Influential Research Articles	
	of 2011 by the Robert Wood Johnson Foundation.	
2011	Project ECHO™ highlighted on Discovery Channel "Health IT: Advancing Care,	
	Empowering Patients" airing on the Discovery Channel Saturday, November 19, 2011.	
	The series showcased Project ECHO <sup>TM</sup> as a leading-edge project.	
2010	21st Century Awards for Best Practices in Distance Learning from the United States	
	Distance Learning Association (USDLA)	
2009	ASHOKA Fellowship	
2009	Lemelson Fellow Lemelson Fellow	
2009	Membership in the Alpha Omega Alpha, Medical Society	
2009	Leadership in Distance Learning Program Administration Award from the United States	
	Distance Learning Association (USDLA)	
2008	eHealth Initiative Award: "Transforming Care Delivery at the Point of Care"	
2008	Computerworld Honors Program Laureate	
2007	Robert Wood Johnson Foundation/Ashoka Foundation Changemakers Competition	

	Winner: "Disruptive Innovations in Health and HealthcareSolutions People Want"
2005	UNM Department of Medicine Translational Research Award
2005	Certificate of Appreciation from NM Clinical Prevention Initiative
2005	Recognized by the New Mexico State Legislature for "outstanding achievements and
	exceptional commitment to the people of New Mexico" and "gratitude expressed for
	improving healthcare in New Mexico"
2004	New Mexico Department of Health Hepatitis Program Hero of Public Health Red Hot Chile
	Award
2002	Dean's Award of Distinction, Outstanding Faculty Performance, Academic Year 2001-
	2002, University of New Mexico
1987	Young Investigator Award, American College of Nutrition
1979	5th in University of Pune, India
1979	4th in Final MBBS Maharaja's College, India

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#### TEACHING:

- Advanced endoscopic techniques, GI fellows, University of New Mexico, Albuquerque, NM
- ☐ GI pathophysiology, 2nd & 3rd year medical students, UNM
- Clinical Gastroenterology, 4th year medical students, UNM-Ward rounds, clinics, and lectures for house staff and fellows, UNM
- ☐ GI Consultation Service, UNM

#### **GRANT AWARDS:**

Leveraging Project ECHO for a Comprehensive Approach to Health and Wellness in Indian Country. Funding Source: Albuquerque Area Indian Health. Date: 9/30/16 0 9/29/17. Principal Investigator.

ECHO Partnership to Improve Zika Care. Funding Source: American Ecademy of Pediatrics. Date: 10/1/16-6/30/17. \$40,000. Principal Investigator.

Support the Enhanced Implementation of Health and Wellness in Indian Country -YR3. Funding Source: Seattle Indian Health Board. Date: 9/30/16 - 9/29/17. \$150,000. Principal Investigator.

AIR Medication Assisted Treatment. Funding Source: American Institute of Research. Date: 9/30/17 - 9/29/18. \$146,118. Principal Investigator.

Expanding Substance Abuse Services through the EHCO Model - Dept. of Health & Human Services. Funding Source: HRSA. Date: 9/30/16 - 9/29/17. \$155.387. Principal Investigator.

ECHO ICAP Launch in Kenya. Funding Source: Columbia University. Date: 11/1/16 - 7/31/17. \$33,464. Principal Investigator.

YR 1 - ACA - Overcoming Harm ECHO HealthInsight w/ BAA. Funding Source: Healthinsight New Mexico. Date: 12/1/16-9/30/17. \$150,000. Principal Investigator.

NM DOC HEP C. Funding Source: NM Department of Correction: Date: 7/1/2016-6/30/2017. Amount: \$113,322. Principal Investigator.

Namibia Phase II Continuation with I-TECH. Funding Source: University of Washington. Date: 4/1/17 - 3/31/18. \$40,000. Principal Investigator.

Technical Assistance for Autism and HIV . Funding Source: Nicholson Foundation: Date 6/1/17- 6/30/18. \$150,000. Principal Investigator.

ECHO Partnership with USAID Assist for Hospital Acquired Infections and Zika. Funding

Source: University Research Co. LLC. Date: 4/15/17 – 8/14/17. \$44,401.00. Principal Investigator.

UNC Medication Assisted Treatment. Funding Source: University of North Carolina. Date: 9/30/17 - 9/29/18. Principal Investigator.

ECHO in Cameroon and Cote D'Ivoire. Funding Source: Elizabeth Glaser Pediatric AIDS Foundation. Date: 10/1/16 -3/31/17. \$55,000. Principal Investigator.

Expanding Substance Abuse Services through the ECHO Model - Dept. of Health & Human Services. Funding Source: HRSA. Date 9/30/16 - 9/29/18. \$ 2,299,918.

Awareness and Access to care for Children and Youth with Epilepsy. Funding Source: American Academy of Pediatrics. Date: 9/1/16 - 8/31/19. 3YR Award 89,000 per year for a total of \$267,000.00. Principal Investigator.

Telementoring Services Defense Agency. Funding Source: Department of Defense. Date: 9/17/16 - 8/30/17. \$ 763,565.01. Principal Investigator.

NM AETC. Funding Source: Dallas County Hospital District (Parkland). Date: 9/1/16 – 6/30/17. \$ 350,000. Principal Investigator.

Namibia HIV ECHO Expansion. Funding Source: ITECH. Date 4/1/16 – 9/30/16. \$63,800. Principal Investigator.

ECHO Autism: Bringing Best Autism Care to Primary Care. Funding Source: Massachusetts General. Date 9/1/15-8/31/16. \$125,000. Principal Investigator.

Leveraging ECHO to Enhance Cancer Prevention, Screening Treatment and Follow-Up Care. Funding Source: Bristol Myers Squibb. Date: 4/14/16 – 10/3/16. \$188, 500. Principal Investigator.

Southeast Asia Health Systems. Funding Source: Merck Foundation. Date 1/1/16 - 6/30/16. \$150,000. Principal Investigator.

NM PTCT Residency Training. Funding Source: Hidalgo. Date 2/1/15-1/31/16. \$10,000. Principal Investigator.

Leveraging Project ECHO for a Comprehensive Approach to Health and Wellness in Indian Country. Funding Source: Albuquerque Area Indian Health Board, Inc. Date 9/30/15-9/29/16. \$ 94,500.00. Principal Investigator.

Telementoring Services Defense Agency. Funding Source: Department of Defense. Date: 9/17/15 - 8/30/16. \$ 754,488.00. Principal Investigator.

NM AETC. Funding Source: Dallas County Hospital District (Parkland). Date: 9/1/15 - 6/30/16. \$ 400,000. Principal Investigator.

Project ECHO Georgia HCV Elimination Project. Funding Source: L.I.F.E.R (Liver Institute and Foundation for Education and Research). Date: 9/1/15 – 10/31/16. \$230,974.00. Principal Investigator.

Leveraging Project ECHO to Support the Enhanced Implementation of Health and Wellness in Indian Country. Funding Source: Urban Indian Health Institute. Date: 9/1/15-9/29/16. \$150,000.

Principal Investigator.

CCSAT ECHO National Addictions and Substance Abuse. Funding Source: Substance Abuse and Mental Health: Date: 9/30/15-9/29/16. Amount: \$149,934. Principal Investigator.

TB Border Health Project. Funding Source: US-Mexico Border Health Commission (DHHS): Date: 01/01/15-9/23/15. Amount: \$22,500. Principal Investigator.

Leveraging the ECHO Model to Improve Quality in FQHC's and Transform the US Healthcare. Funding Source: GE Foundation: 6/1/2015-5/31/2018. Amount \$14,000,000. Principal Investigator.

NM DOC HEP C. Funding Source: NM Department of Correction: Date: 7/29/2015-7/29/2016. Amount: \$113,322. Principal Investigator.

Endocrinology ECHO - The Leona M. & Harry B. Helmsley Charitable Trust Grant. Funding Source: Helmsley Charitable Trust. Date: 5/1/15-4/30/18. Amount: \$202,500. Principal Investigator.

UNM HSC UNM HSC Leveraging Telehealth for Prevention. Funding Source DOH: Date: 11/1/2015-6/30/2015. Amount: \$400,000 Principal Investigator.

Residency Training. Funding Source NM PTCT: Date: 02/01/2015-01/31/2016 Amount:\$10,000 Principal Investigator.

AAP Improving Access to Care. Funding Source: NIH/National Institute of Health. Date: 11/1/2015 -10/31/2016. Amount \$20,000 .Principal Investigator

ECHO Epilepsy Expansion. Funding Source: NIH/National Institute of Health. Date: 11/1/2015 -10/31/2016. Amount \$87,000 .Principal Investigator.

Implementing Project ECHO to Build Namibian National Capacity to Mentor and Train Providers. Funding Source: Elizabeth Glaser Pediatric AIDS Foundation Date: 04/01/2015-11/30/2015. Amount: \$293,853 Principal Investigator.

UNM HSC Innovations in Telehealth: Funding Source: DOH Date: 11/1/2015-6/30/2015. Amount: \$500,000 Principal Investigator.

Leveraging Project ECHO to Support the Enhanced Implementation of Health and Wellness in Indian Country. Funding Source: Urban Indian Health Institute. Date 3/5/15-9/29/15. Amount: \$150,000. Principal Investigator.

Project ECHO Developing a Practice Transformation Network to Improve Quality In FQHC's Planning Grant: Funding Source: GE Foundation: Date: 12/15/2015-06/15/2015. Amount: \$150,000. Principal Investigator.

Leveraging Project ECHO for a Comprehensive Approach to Health and Wellness in Indian Country. Funding Source: Albuquerque Area Indian Health Board, Inc. Date: 10/1/14-9/30/15. Amount: \$94,500. Principal Investigator.

Implementing Project ECHO to Build Namibian National Capacity to Mentor and Train Providers. Funding Source: Elizabeth Glaser Pediatric AIDS Foundation Date: 11/1/14-03/31/2015. Amount: \$106,991 Principal Investigator.

Supporting New Mexico Clinical Sites Participation in Project ECHO. Funding Source: BlueCross Blue Shield of New Mexico. Date: 12/1/2014-11/30/2015. Amount \$25,000. Principal Investigator.

ECHO Epilepsy Expansion. Funding Source: NIH/National Institute of Health. Date: 11/1/2014 -10/31/2015. Amount \$127,000.Principal Investigator.

Endocrinology ECHO - The Leona M. & Harry B. Helmsley Charitable Trust Grant. Funding Source: Helmsley Charitable Trust. Date: 5/1/14-4/30/17 Amount: \$6,493,692. Principal Investigator.

Clinical Coordinating Center for the NIDA. Center for the Clinical Trials Network. Funding Source: EMMIS (NIDA) Date: 6/1/14 – 8/15/14. Amount: \$199,603. Principal Investigator.

The Leona M. & Harry B. Helmsley Charitable Trust Grant. Funding Source: Helmsley Charitable Trust. Date: 9/1/13-12/31/13 Amount: \$192,600. Principal Investigator.

Use of the ECHO Model to Disseminate NIDA/CTN Buprenorphine Blending Trainings. Funding Source: NIDA. Date: 05/30/2013-05/29/2014. Amount: \$92,000. Principal Investigator.

Building the Capacity to Scale the Project ECHO Model Nationally. Funding Source: Robert Wood Johnson Foundation. Date: 05/15/2013-05/14/2015. Amount: \$5 million over 2 years. Principal Investigator.

ECHO Model in Community Health Centers. Funding Source: Centers for Disease Control and Prevention (CDC). Date: 03/01/2013-02/28/2014. Amount: \$200,000. Principal Investigator.

Rural Access to Primary Care through Project ECHO. Funding Source: GE Foundation. Date: 12/14/2012-12/13/2015. Amount: \$4,669,984. Principal Investigator.

Leverage innovative care delivery and coordination model: Project ECHO (Health Care Innovation Challenge). Funding Source: Centers for Medicare and Medicaid Services. Date: 07/01/2012-6/30/2015. Amount: \$8,473,809. Principal Investigator.

Medicaid Match for Project ECHO. Funding Source: New Mexico Human Services Department. Date: 7/1/12-6/30/13. Amount: \$931,141. Principal Investigator.

Project ECHO IPA with the Department of Defense. Date: 5/15/12-5/14/15. Amount \$1,259,132 in 7 individual intergovernmental personnel agreements. Principal Investigator.

Retinal Imaging via Community Health Workers Funding Source Vision Quest Biomedical LLC Date: 9/5/11-9/4/12. Amount: \$50,000. Principal Investigator.

Project ECHO IPA with VA US Veterans Administration Date: 3/1/11 - 2/28/13. Amount: \$976,767 in 10 individual intergovernmental personnel agreements. Principal Investigator.

Hepatitis C Treatment Expansion Initiative: Evaluation and Technical Assistance. Funding Source University of South Florida Date: 9/1/11 - 8/31/12. Amount: \$116,224. Principal Investigator.

Expansion of Rural Health Care Research Infrastructure through the ECHO Model. Federal funding source: Agency for Healthcare Research and Quality, Minority Research Infrastructure Support Program (M-RISP). Date: 09/21/2007-08/31/12. Amount: \$1.5 million over 3 years. Principal Investigator.

Project ECHO Hepatitis C Ambulatory Care Quality Improvement in New Mexico through Health Information Technology. Grant funding source: Agency for Healthcare Research and Quality. Date: 09/30/2009-7/31/2012 Amount: \$1,104,970 over 3 years. Principal Investigator.

Project ECHO: Extension for Community Health Outcomes. State funding source: New Mexico Department of Health. Date: 07/01/07-06/30/12. Amount: \$7.2 million. Principal Investigator.

Project ECHO: Extension for Community Health Outcomes. State funding source: New Mexico State Legislature. Date: 07/01/05-06/30/012. Amount: \$3.7 million Principal Investigator.

Demonstration and Replication of the ECHO Model: A Robust Paradigm to Expand Best Practice Care for Vulnerable Populations. Grant funding source: Robert Wood Johnson Foundation. Date 02/15/2009-02/14/2012. Amount: \$5 million over 3 years. Principal Investigator.

Project ECHO: Extension for Community Health Outcomes. Federal funding source: Agency for Healthcare Research and Quality. Date: 09/30/04-08/31/07. Amount: \$1.5 million over 3 years. Principal Investigator.

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Richard Larson, M.D., Ph.D. Executive Vice Chancellor Vice Chancellor for Research

14 August 2018

Brock International Prize in Education 2021 S Lewis, Suite 415 Tulsa OK 74104-5733

Dear Jury Members:

I am pleased to write this letter of support for Dr. Sanjeev Arora, Distinguished Professor of Medicine at the University of New Mexico Health Sciences Center and the Founder and Director of Project ECHO, for the 2019 Brock International Prize in Education.

Although there are many distinguished faculty at US medical schools including the University of New Mexico School of Medicine, very few have changed the very paradigm in which education is delivered. Dr. Arora is one of those rare individuals – a visionary with the potential to improve the status of disadvantaged persons around the world. Through his insight, creativity, and initiative, he developed a novel program called Project ECHO (Extension for Community Health Outcomes) that is now viewed as a revolutionary and effective way of delivering education to people who would otherwise not have access both nationally and internationally.

Project ECHO is dedicated to the de-monopolization of expert knowledge using the ECHO model, which combines case based learning, the dissemination of best-practices, and professional mentoring using videoconferencing technology. It currently has over 220 global ECHO programs covering over 100 complex conditions in 31 countries. As the Executive Vice Chancellor and Vice Chancellor for Research at the University of New Mexico Health Sciences Center, I am honored to have been part of the start and one of the original and continued supporters of the ECHO model. Project ECHO has risen from humble beginnings to become one of the most widely recognized innovative educational delivery models in the US.

Dr Arora's leadership and dedication to education has created a real and lasting change for underserved and disadvantaged people all over the world. Through all his work with Project ECHO, he has become one of the leading voices for innovated education delivery. The work being done here in New Mexico, and all over the world, using the ECHO model is truly inspiring and changing lives for the better. Because of the unprecedented impact of Project ECHO and his leadership, I recommend Dr Arora for the 2019 Brock International Prize in Education.

Sincerely,

Richard Larson, MD, PhD Executive Vice Chancellor Vice Chancellor for Research UNM Health Sciences Center



1111 West 17th Street Tulsa, Oklahoma 74107-1898 918-561-1460 health.okstate.edu/echo

August 20, 2018

Selection Committee Members 2019 Brock International Prize in Education 2021 S. Lewis, Suite 415 Tulsa, OK 74104-5733

#### Dear Selection Committee Members:

First, we would like to thank you for the contributions your organization has made to bring light to the innovative educators that are making differences throughout the world by impacting the lives of our next generation learners. It is our pleasure to present such an individual for your consideration for the 2019 Brock International Prize in Education. Dr. Sanjeev Arora, Distinguished Professor of Medicine and Founder of the International Platform for education and mentorship, Project ECHO (Extension for Community Healthcare Outcomes), would be that individual.

Dr. Arora, through the use of the Project ECHO educational model, is changing the lives of millions of individual patients, physicians, nurses, social workers and school based educators for the betterment of society. Dr. Arora's goal, "to touch the lives of a billion people", is well on its way. Project ECHO is a revolution in education and its delivery of information to exponentially increase a learner's ability to meet the local needs within their communities. While initially designed to reach disparities in specialty healthcare, Dr. Arora, through Project ECHO, is meeting the ever-expanding drive for the democratization of education throughout a spectrum of medicine, clean water, energy, prison reform and equalizing social injustice around the world.

Project ECHO uses a hub/spoke concept through the use of an internet based ZOOM platform. All participants become not only learners, but educators in the replication of specialty knowledge within underserved communities around the world. The application of the knowledge obtained is radically transforming those learners receiving this education so that specialty knowledge now becomes the "standard of evidence based practice" within the local realm.

Dr. Arora is a gentle man who has made a monumental change across the world. While he gives credit to the local hub/spoke teams it is his leadership that has driven Project ECHO partners to see his vision and replicate that vision for the educational needs within their sphere of influence. Here at Oklahoma State University, we saw the vision and started the development of ECHO clinics in our state. In the past nineteen months we have developed learning platforms in addiction medicine, adult mental health disorders, pediatric behavioral and emotion health disorders, human immunodeficiency, hepatitis C disorders, forensic psychiatry, dementia and Alzheimer's care. We have further developed a Tele-education development ECHO meeting the educational dissemination of best practices in schools for science, technology, engineering and

math. Through Dr. Arora we are now touching the lives of tens of thousands patients and participants throughout Oklahoma.

Utilizing the insights and guidance from Dr. Arora, we have seen miraculous changes in the lives of our Oklahoma population. The networking education provided has touched the lives of rural America, tribal nations, urban arenas, our veterans and prison systems. We are now in the process of international expansion for the developed to impact literacy rates in Belize.

Your mission to recognize an individual "who has made specific innovation or contribution...resulting in an impact on the practice or understanding of the field of education" is the reason behind our nomination for consideration of Dr. Sanjeev Arora for the 2019 Brock International Prize in Education. Out of our great respect for Dr. Arora, it is our honor to put his name forward as a result of his unprecedented impact on education, medicine, societal issues and his humble attitude toward service to his fellow man. Please feel free to contact us for any further insight.

Sincerely,

Kayse M. Shrum, D.O. FACOP

President and Dean

Oklahoma State University

Center for Health Sciences

Joseph R. Johnson, D.O., FACOOG

Associate Dean for Project ECHO

Oklahoma State University

Center for Health Sciences





## **Project ECHO® (Extension for Community Healthcare Outcomes)**

August 14, 2018

Dear Jury Members of the 2019 Brock International Prize in Education:

It is my pleasure to provide this letter of support for Dr. Sanjeev Arora, Distinguished Professor of Medicine and the Founder and Director of Project ECHO, for the 2019 Brock International Prize in Education.

I am a Gastroenterologist and Hepatologist at the University of New Mexico in Albuquerque. Dr. Arora and I have been friends and partners since 2004. It has been my amazing good fortune to work with him first in a clinic devoted to eradicating hepatitis C in New Mexico and, more recently, as an Associate Director of Project ECHO. I feel that Dr. Arora's development and spread of Project ECHO in New Mexico and around the world embodies the spirit of the Brock International Prize in Education.

In 2003, Dr. Arora recognized that people in rural and underserved areas had no access to specialty medical care. Most were unable to travel to medical centers where specialists practiced. Dr. Arora felt that specialty knowledge could be moved to the patients rather than continuing to try to move the patients to where the specialty knowledge was.

Project ECHO (Extension for Community Health Outcomes), uses a hub and spoke model to train primary providers to deliver specialty care in their clinics and geographic regions. Hub experts and spoke providers "meet" weekly by videoconference. The spoke providers present cases to the experts who help them manage cases on their own through ongoing education and mentoring. Over time the spokes become experts in treating the condition on their own expanding the specialty knowledge and availability exponentially. Additionally Dr. Arora has found that the providers who participate in Project ECHO are more satisfied with their situation and more likely to remain in rural and/or underserved areas. This increased satisfaction and self-efficacy seems to be related to mentoring and networking which the model provides.

The model is now used in almost every state in the US and in 31 countries around the world including India, Vietnam, and many African countries. It is used widely in the Veterans Administration system, the Department of Defense and the Indian Health Service with great success. The ECHO model is highly adaptable—it works across geographic regions, across cultures, and across governmental systems. In healthcare, for example, it is being used to spread best practices for problems as diverse as cancer, bone health, behavioral health, and substance use disorders. Dr. Arora's goals for Project ECHO include touching the lives of one billion people by 2025, and for his ECHO Institute in New Mexico, and all ECHOs around the world, to continue to provide no cost training and support for anyone interested in applying the model.





## Project ECHO® (Extension for Community Healthcare Outcomes)

As a physician, Dr. Arora has always felt that many of the medical problems we see are related to early childhood development and adverse childhood events. He has long felt that supporting and mentoring educators and impacting education has a vastly greater potential for impacting underserved populations than treating chronic diseases. To this end, Dr. Arora has encouraged the use of the ECHO model in the field of education. Experts at a hub mentor educators (spokes) to train best practices in education and provide mentoring and networking support for educators. In India, ECHO is used to train teachers to teach math and English. In the US ECHO is used to train and mentor special education teachers, classroom teachers, principals and school administrators. It is used to train and mentor teachers to share resources and improve student retention and graduation rates, and is also used to support statewide Early Warning Systems to help provide school systems with resources to better serve their students. The ECHO model has evolved into a world leading education and telementoring delivery system that is expanding access to best practices in education. Using the ECHO model, educators around the country and around the world are provided mentoring and networking with colleagues and are experiencing increased joy of work.

The Brock International Prize in Education is given to an individual who has "made a specific innovation or contribution to the science and art of education, resulting in a significant impact on the practice or understanding of the field of education". I cannot think of a person who more embodies this than Dr. Arora. He has devoted his career to providing healthcare and now educational support to underserved populations around the word. Because of Dr. Arora's vision to demonopolize knowledge so it can be shared with all, and his dedication to serving underserved populations, I strongly and enthusiastically recommend him for the 2019 Brock International Prize in Education.

Sincerely, Marfin Kertin

Martin Kistin, MD

Associate Director, Project ECHO

Professor of Medicine



August 13, 2018

Selection Committee Members 2019 Brock International Prize in Education 2021 S. Lewis, Suite 415 Tulsa, OK 74104-5733

Dear Esteemed Committee Members:

I am honored to submit this letter of support for the nomination of **Dr. Sanjeev Arora** for the 2019 Brock International Prize in Education. Dr. Arora is a Distinguished Professor of Medicine as well as the Founder and Director of the internationally renowned Project ECHO at the University of New Mexico Health Sciences Center. I met Dr. Arora in 2013 and as a result of our collaborations, the University of Wyoming is bringing innovative education to thousands of educators, service providers, and families throughout the world.

Project ECHO is a movement to demonopolize knowledge and amplify the capacity to provide best practice care for underserved people all over the world. This low-cost, high-impact intervention is accomplished by linking expert inter-disciplinary specialist teams with multiple primary care clinicians, or rural educators, simultaneously through teleECHO clinics, where experts mentor and share their expertise via case-based learning, enabling participants to treat patients or provide specialty education in their own communities.

**Dr. Arora** gave me the authority, responsibility and support for translating the ECHO model from its origins in disseminating healthcare knowledge to primary care providers to support educators, originally related to assistive technologies. Now, WIND ECHO networks address numerous areas of education for addressing emerging and ongoing needs with the ultimate goal of improving students' educational and post-educational outcomes. Our ECHO superhub is the only site in the world designed specifically for educators, and with the dissemination of this model, there are more on the way.

His inspired guidance and passion for democratizing knowledge to provide better outcomes to the underserved make **Dr. Sanjeev Arora** a perfect candidate for the 2019 Brock International Prize in Education. Without any hesitation, I recommend him for this prize. Please contact me if I can provide further support for his nomination.

Sincerely,

Sandra Root-Elledge Executive Director

Sandra Most - Elledge

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August 13, 2018

### To Whom It May Concern

I am writing in reference to Dr. Sanjeev Arora, who is a Distinguished Professor of Medicine and the Founder and Director of Project ECHO, which is one of the most innovative educational models in the world.

Project ECHO (Extension for Community Healthcare Outcomes) is an educational and mentoring model that dramatically increases access and reduces disparities in specialty knowledge in rural and underserved areas by providing front-line clinicians and educators with the knowledge and support they need. ECHO not only moves knowledge to rural communities, but also develops a lasting relationship amongst specialists, primary care clinicians, and other community teachers.

As the founder and Director of Project ECHO, based at University of New Mexico, Dr. Arora and his team provide training to participants free of charge providing much need professional education credits. Since its inception, Project ECHO has expanded significantly and now offers programs for over 100 complex conditions at more than 220 sites in 31 countries.

As the Vice Principal of Ambience Public School, New Delhi a private school that serves 1200 students I started the first ECHO in 2015. The school became the first mainstream educational institute to employ the ECHO model to mentor teachers in literacy and math. Thereafter we expanded the program to various other topics and have nine successful ECHO programs in education. In my current role as Principal of Ambience Public School, Gurugram I have migrated these clinics to the new institution. The ECHO model has proven its success in the medical field, and is an ideal mentoring model that can be successfully used to not just improve skill sets of teachers, but also to provide professional support and bring back the joy of work. As teachers become more confident and well informed about best practices, our children are more likely to succeed.

I have personally known and worked with Dr. Arora for many years, and his humanitarian vision to provide service to the underserved through the ECHO mentoring model is unsurpassed by anyone else I have ever known. He works tirelessly to improve the lives of others and to bring about systems change. I am proud to know him as my mentor and friend.

Istrongly support the nomination of Sanjeev Arora for the 2019 Brock International Prize in Education. It is only through efforts such as his that we can continue to fulfill our vision to improve education models throughout the world.

Sincerely,

Dr. Anuradha Rai, MA, Bed, D Litt.

Principal,

Ambience Public School, Gurugram



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CHRISTOPHER N. RUSZKOWSKI SECRETARY OF EDUCATION

SUSANA MARTINEZ GOVERNOR

Brock International Prize in Education Prize Committee

Re: Dr. Sanjeev Arora, Distinguished Professor of Medicine

August 14, 2018

To Whom It May Concern:

I am honored to write this letter in support of Dr. Sanjeev Arora, Distinguished Professor of Medicine and the Founder and Director of Project ECHO at the University of New Mexico Health Sciences Center, for the 2019 Brock International Prize in Education.

As part of my role as the Director at New Mexico Public Education Department (NM PED), College and Career Readiness Bureau, I evaluated the graduation rates in New Mexico High Schools, which are among the worst in the country (the 4-year graduation rate for 2015-16 was 71%). I realized through my evaluation that graduation rates among students that participate in classes and activities in Career Technical Education (CTE) are above 86%. With this information in hand, I decided to find a way to provide New Mexico students with more opportunities to be provided with CTE to improve graduation rates and help pave a path to a better future.

I commissioned Dr. Michael Stanton to develop a Career Readiness Handbook for teachers and school counselors. From this came the idea to use Project ECHO to train teachers and school counselors to provide career readiness courses and training in areas of New Mexico where resources are limited. The goal of this new program, the New Mexico ECHO for Education (NMEE) network, is to increase and advance opportunities for students to improve their personal pathways to college and careers by providing support to the adults who guide them into these pathways.

The partnership between the NM PED and Project ECHO has created a knowledge network of teacher leaders in 15 of New Mexico's under-resourced high schools. The project launched January 8th, 2018, with the expectation that participants in this inaugural virtual community of practice would implement what they learned in their classrooms and school communities and that this would help students and improve graduation rates. Many of these educators have shared that the knowledge and expertise gained through the NMEE network was satisfying to their professional careers and valuable to their students and their school communities. Initial feedback is that participants have found the network helpful and rewarding. One participating site described it as the best continuing education experience she has ever had.

We are excited that through ongoing collaboration among NM PED, Dr. Arora and Project ECHO, the NMEE network will be continuing this fall, and expanding to serve two additional topics of critical need in our state. In addition to CTE, we will be creating two additional professional learning communities, one for utilizing data to identify students who are drifting off track, and another to support students who want to become educators themselves.

Through our partnership, we are helping rural and underserved teachers and students gain the knowledge they need for the best possible future. The ECHO model is truly a game changing innovation and we are excited to be a part. It is for these reasons that I believe Dr. Sanjeev Arora would make an excellent candidate for the 2019 Brock International Prize in Education.

Sincerely,

Elaine Perea, PhD