Stanford-AstraZeneca Collaboration

Operating a Multi-Year Strategic Collaboration Designed to Address Health Care Challenges

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BACKGROUND

The **Stanford- AstraZeneca Collaboration**, is a multiyear strategic collaboration intended to address major health care challenges and provide funding to Stanford investigators to support their research initiatives. The focuses include: cardio-metabolic and respiratory diseases, oncology, mobile health (mHealth), innovations in clinical trial design and operations, big data and novel data analytics approaches, and innovative education and training initiatives.

Primary Aims:

1) Leverage digital health and information technology to improve the delivery, quality, and costs of healthcare

2) Stanford designated as "Center of Excellence" by AstraZeneca under the collaboration

Collaboration Award Period: 3-years

Awarded Projects: 6 (2/year; each for a 1-year duration)

Total Award Amount for Collaboration: $2m

AWARDED PROJECTS

	Investigator	Project Title	Description
Year 1 (2016)	Nigam Shah, PhD	"Learning personalized treatment guidelines"	Develop methods of causal inference that are applicable to electronic health records. Generate human-readable clinical practice guidelines from causal models
	Mintu Turakhia, MD	"Smartphone guided cardiac rehabilitation and medication adherence management after acute coronary syndrome"	Randomized controlled trial of the BrightHeart Program (app + personal health coach + online web platform) compared to usual care in patients post-PCI with primary outcomes of CV medication adherence and persistence
Year 2 (2017)	Tina Hernandez-Boussard, PhD	"Machine learning classifiers for automated staging of prostate cancer patients"	Build a tool that will automate the manual and extremely labor-intensive staging of prostate cancer, using clinical and pathological EHR data
	Daniel Rubin, MD	"A system to enable distributed precision medicine"	Develop an analytical engine that can use multi-institutional EHR data to build statistical models that can improve decision making, without compromising data privacy (HIPAA) and concerns about data sharing
Year 3 (2018)	Oliver Aalami, MD	"Implementation of a Patient-Centered Distributed Clinical Trial/Registry to Optimize Follow-up and Patient Reported Outcomes Data Collection"	Real-time functional status tracking registry using VascTrac smartphone application for patients undergoing PAD, CABG, or TAVR interventions
	Joseph Wu, MD	"Cardio-Oncology: Identifying Cardiac Safety Signals in Era of Precision Medicine"	Using precision medicine techniques to predict chemotherapy-induced cardiotoxicity (heart failure) risk

METHODS

The Request for Proposal announcement was sent electronically via Medicine listserv, Medicine Newsletter and on SCCR's website.

Eligibility:

All Stanford Medicine faculty and instructors with PI eligibility

Required Submission Format:

Cover page; proposal; detailed budget & justification, PI(s) CV

Project Selection Process:

The Committee reviewed and evaluated all submitted proposals based on the pre-designated criteria and selected two projects each year for funding.

STANFORD FACULTY TESTIMONY

"I was part of the first cohort, so things were still informal, and processes being set up. The willingness to engage by the AZ team was great"
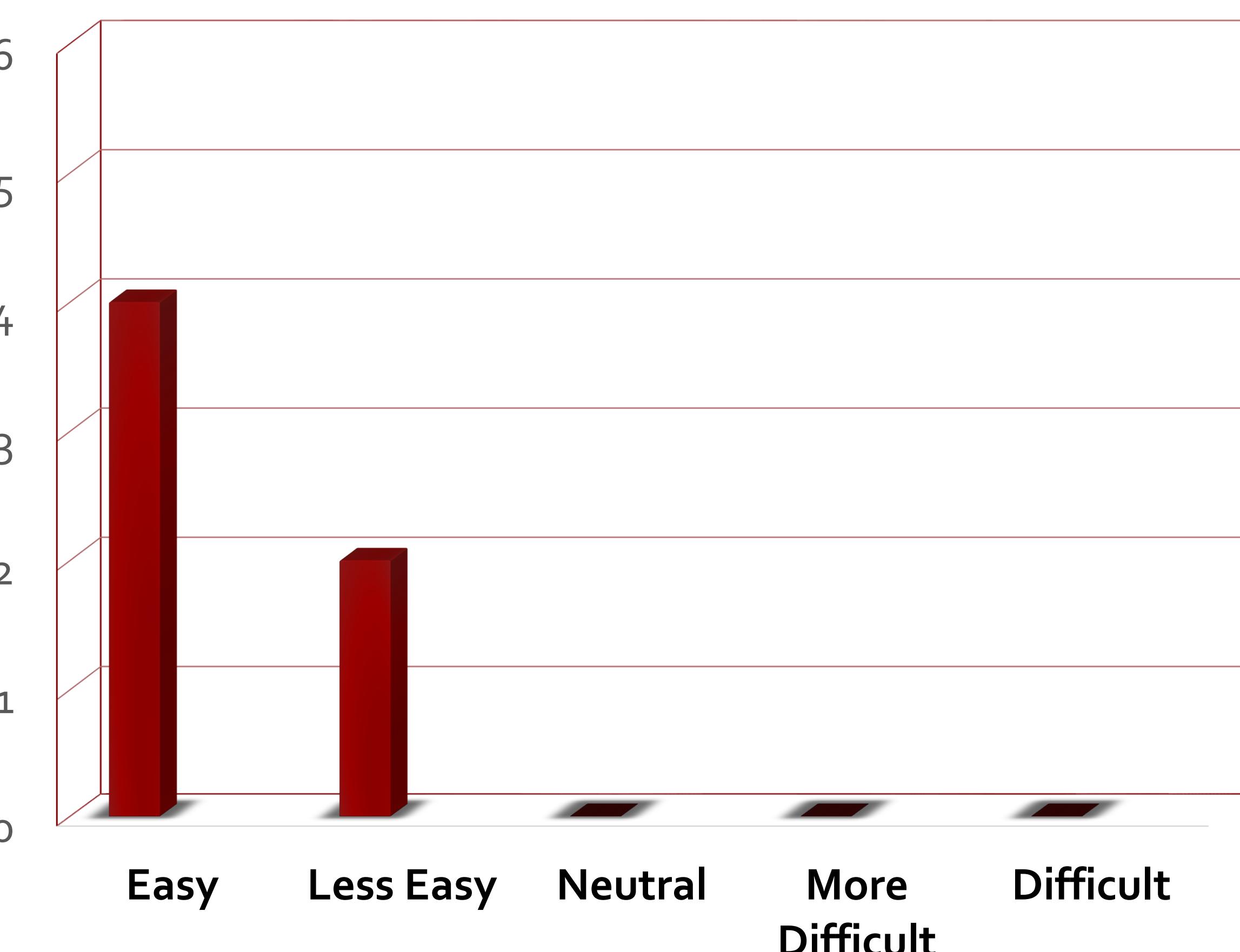
"The project went well, administrative processes are efficient"

"The continued communication with AZ is extremely helpful and aids in identifying other projects that might align with AZ"

"The application was quite straightforward. Having received the award was a big positive! "

" There were no issues in the mechanics of funding the application, support, or interactions with the sponsor. It was all outstanding and serves as a sound model going forward."

FACULTY EXPERIENCE WITH THE RFP PROCESS

Bar chart: Easy (~4), Less Easy (~2), Neutral (0), More Difficult (0), Difficult (0). Y-axis 0–6.

RFP METRICS (2016-2018)

Faculty Who Submitted Proposals (+ Co-PIs)	49
Submitted Proposals	51
Number of Awards	6

COLLABORATION COMMITTEE MEMBERS

Stanford		AstraZeneca	
Kenneth Mahaffey, MD	Vice Chair of Clinical Research; Professor of Cardiovascular Medicine; Director of SCCR	Frank Sifakis, PhD, MPH, MBA	Head, HEOR
Doug Owens, MD, MS	Director of Center for Health Policy/Center for Primary Care/Outcomes Research	Greta Hoetzer, PhD	Regional Liaison Director, CVMD
Haley Hedlin, PhD	Sr. Biostatistician	Gary Takher, PharmD, MBA	Clinical Account Director, MA-MM
		Nani Bhalla, MD	Franchise Head, CV
		Cindy Fraser, MD	Franchise Head, Oncology

SUCCESSES OF THIS COLLABORATION

- **People**:
  o Connected people within Stanford
  o Connected AZ people with Stanford people
  o Connected AZ people with AZ people

- **Opportunity**: several ancillary projects have been created

- **Operations**: seamless interaction between Stanford & AZ

- **Project Management**: excellent follow-up, communication, project timeline adherence

- **Project Completion**: 4 of the projects are complete; 2 are on-going

- **Publications:** faculty have multiple in progress

REASONS FOR SUCCESSES

Strong relationships have been created
Continued commitment by leadership and staff
Committed funding for collaboration operations and research projects
Exciting science

WHY DID STANFORD FACULTY APPLY?

❖ To work with industry

❖ To work with SCCR

❖ To work with Industry and wanted the money

❖ To work with industry and SCCR

❖ To work with industry and other

ACKNOWLEDGEMENTS

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