

Compassionate Care in a Technological World

A Call to Action

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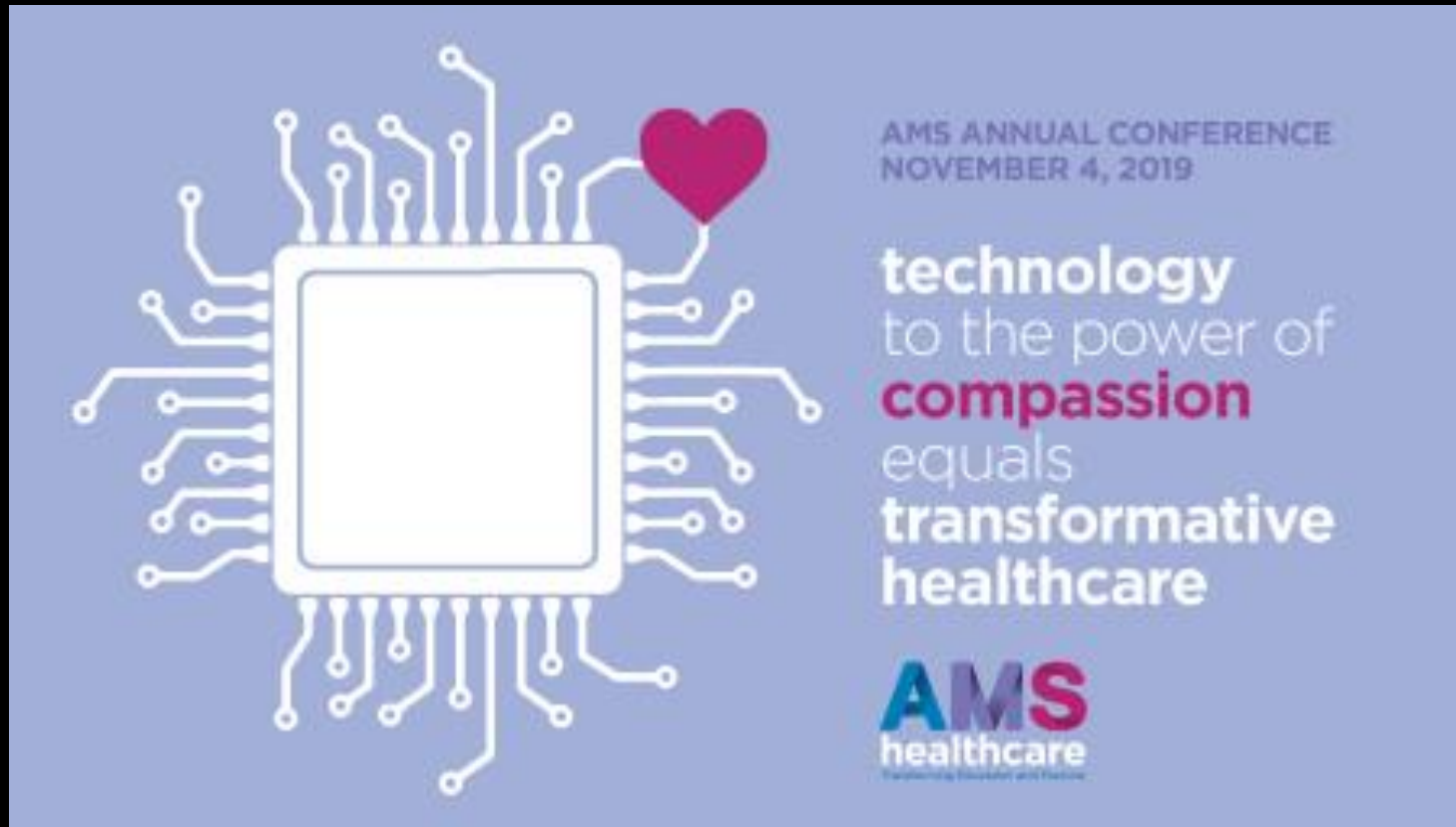
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UNIVERSITY OF
TORONTO

Compassionate Care in a Technological World: A Call to Action

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www.amshealthcare.ca*



@BDHodges1

The Compassionate Care in a
Technological World Initiative

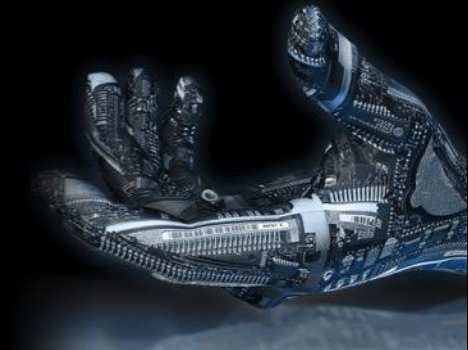
*Without
Compassion
There is No
Healthcare*



I'd like to introduce...



Oh, and our new colleague...



Emergent technologies will change the future of health professional work



THE CHIROPODIST

CATHARINE GRAY



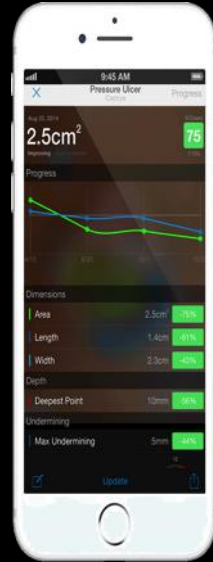
Not enough of this....



Too much of this



Enter...Image Processing for Wound Care



Company: Swift Medical (Toronto)

INPUT

Images of wounds

PROCESSING

Smartphone app

OUTPUT

Measurements
Risk scoring

OUTCOME

Avoid patient
discomfort,
contamination and
manual data entry
errors

*The changes to professional work
will likely run deep... they may
disrupt the very foundations of the
professions*



THE PHYSICIAN

ERIC HORLICK

It will become unacceptable
not to use AI



<http://compassionstl.com/compassionate-nursing-services-shares-top-medication-management-tricks/>

From: Potential Liability for Physicians Using Artificial Intelligence

JAMA. Published online October 04, 2019. doi:10.1001/jama.2019.15064

 W. Nicholson Price *et al*

Scenario	AI recommendation	AI accuracy	Physician action	Patient outcome	Legal outcome (probable)
1	Standard of care	Correct	Follows	Good	No injury and no liability
2			Rejects	Bad	Injury and liability
3		Incorrect (standard of care is incorrect)	Follows	Bad	Injury but no liability
4			Rejects	Good	No injury and no liability
5	Nonstandard care	Correct (standard of care is incorrect)	Follows	Good	No injury and no liability
6			Rejects	Bad	<i>Injury but no liability</i>
7		Incorrect	Follows	Bad	<i>Injury and liability</i>
8			Rejects	Good	No injury and no liability

*Technologies have introduced distance
between healthcare providers and
patients*

“Spending time working on an EHR poses a direct challenge to connecting with patients”



Photo credit AAFP

<https://www.aafp.org/news/practice-professional-issues/20190116ehrstudy.html>

ANNALS OF MEDICINE

WHY DOCTORS HATE THEIR COMPUTERS

Digitization promises to make medical care easier and more efficient. But are screens coming between doctors and patients?

By Atul Gawande November 5, 2018

THE
NEW YORKER



<https://www.newyorker.com/magazine/2018/11/12/why-doctors-hate-their-computers>

WHY ARE NURSES ALWAYS ON THE COMPUTER?

www.freshrn.com

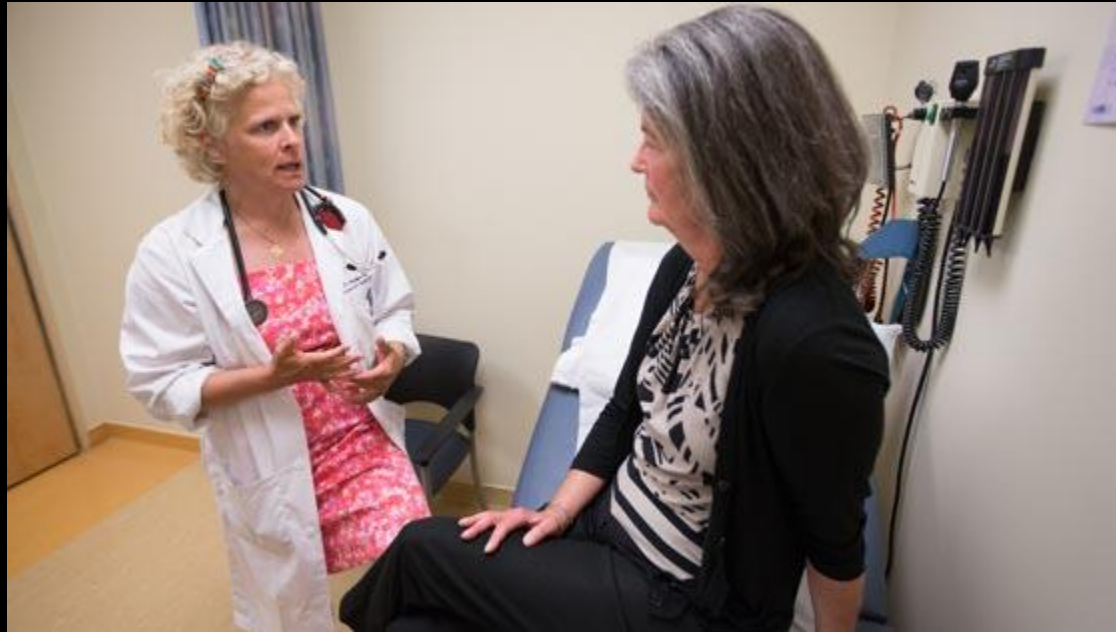
FRESHRN

“Fresh RN: Growing New Nurses”

<https://www.freshrn.com/2014/11/24/why-are-nurses-always-on-the-computer/>

We need to acknowledge that humans and technologies are not opponents

Together, they create an urgent need for compassion—and only together are they likely to address that need



THE INNOVATOR

HEATHER ROSS

Health Professional and Patient Working Together



The professions will survive only if we are versatile, focusing not solely on knowledge and skills—but on the overarching purpose of healthcare

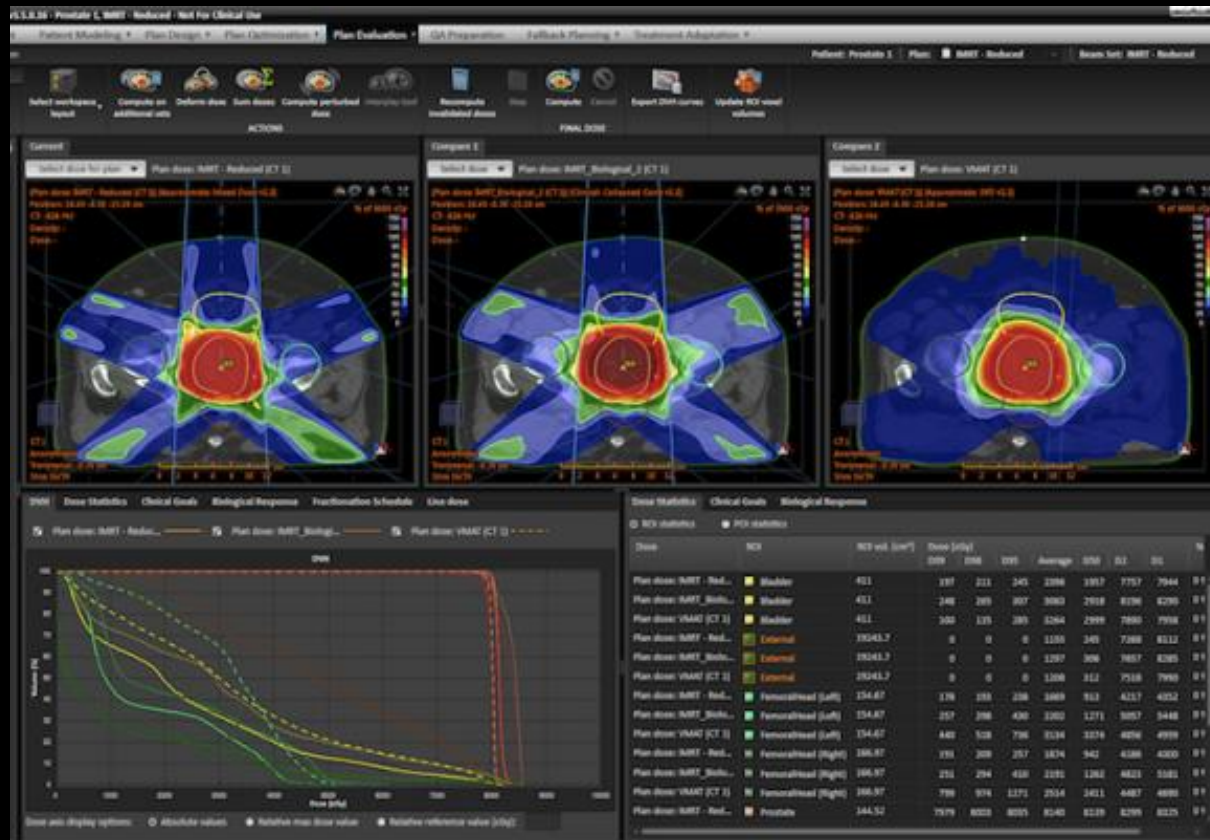


THE EDUCATOR

CATLIN GILLAN

AI has already transformed radiation therapy planning at Princess Margaret Cancer Centre

From 3 hours to 4 minutes per patient





A Cautionary Tale: The Therac 25

<https://hownot2code.com/2016/10/22/killer-bug-therac-25-quick-and-dirty/>



A technology
“black box”
requires thoughtful
training

<https://jakartaglobe.id/context/airlines-not-allowed-to-use-boeing-737-max-8-jets-to-transport-idul-fitri-travelers>

<https://pizzainmotion.boardingarea.com/2017/12/20/aviation-geek-dream-boeing-flight-simulator/>

Original Article

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Key words:

artificial intelligence; competency; education, practice; professional; treatment planning

Professional implications of introducing artificial intelligence in healthcare: an evaluation using radiation medicine as a testing ground

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¹Princess Margaret Cancer Centre, Toronto, Ontario, Canada, ²University of Toronto, Toronto, Ontario, Canada, ³TECHNA Institute, Toronto, Ontario, Canada and ⁴University Health Network, Toronto, Ontario, Canada

Abstract

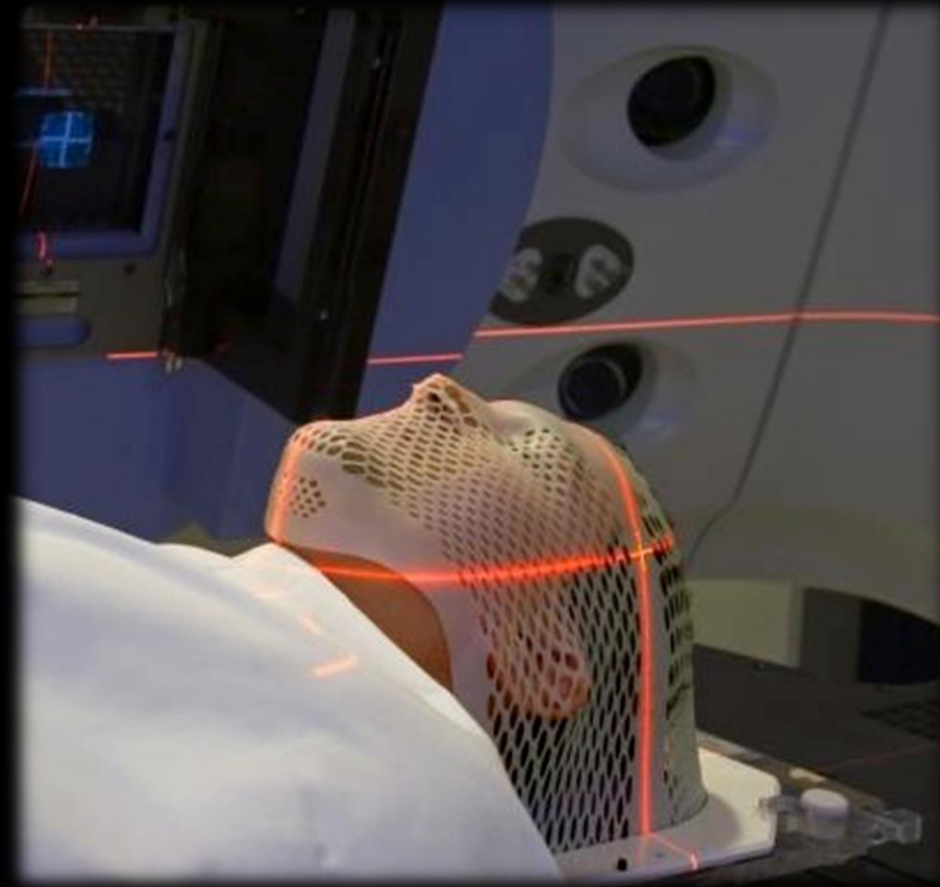
Aim: This study will evaluate radiation medicine professionals' perceptions of clinical and professional risks and benefits, and the evolving roles and responsibilities with artificial intelligence (AI). *Methods:* Radiation oncologists (ROs), medical physicists (MPs), treatment planners (TP-RTTs) and treatment delivery radiation therapists (TD-RTTs) at a cancer centre in preliminary stages of implementing an AI-enabled treatment planning system were invited to participate in uniprofessional focus groups. Semi-structured scripts addressed the perceptions of AI, including thoughts regarding changing roles and competencies. Sessions

The technological revolution is a burning platform to restate and reinvigorate the commitment to compassionate healthcare



THE PATIENT ADVOCATE

JUDITH JOHN



Machine environments evoke fear

Our Gift of TIME ?

“The super-streamlined workflow that lies before us, affecting every aspect of healthcare as we know it today in one way or another, could be used in two very different ways: to make things much better or far worse”

Eric Topol 2019





We must use the gift of
time to be *present*

Computerized algorithms can be insensitive to cultural and situational specificities

The SCIENTIST

Nikki Woods

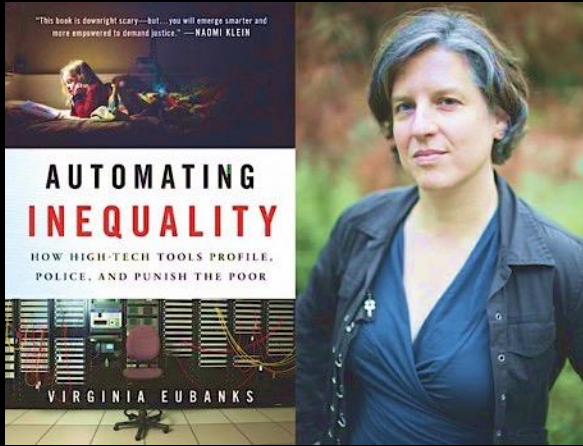


Alexa...

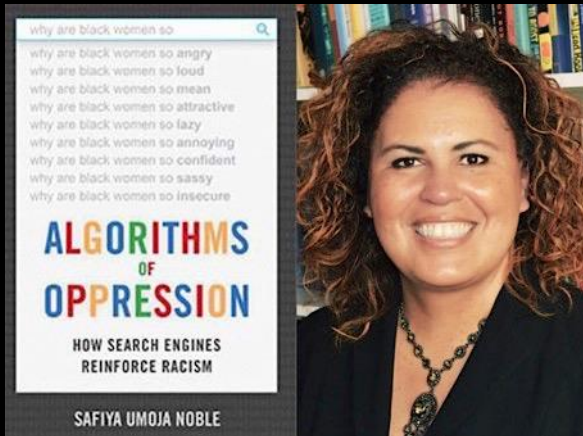
Is Jesus
Dead?



<https://tech2.org/india/mom-catches-a-6-year-old-girl-using-alexa-to-solve-a-math-problem-twitter-impressed-its-viral/>



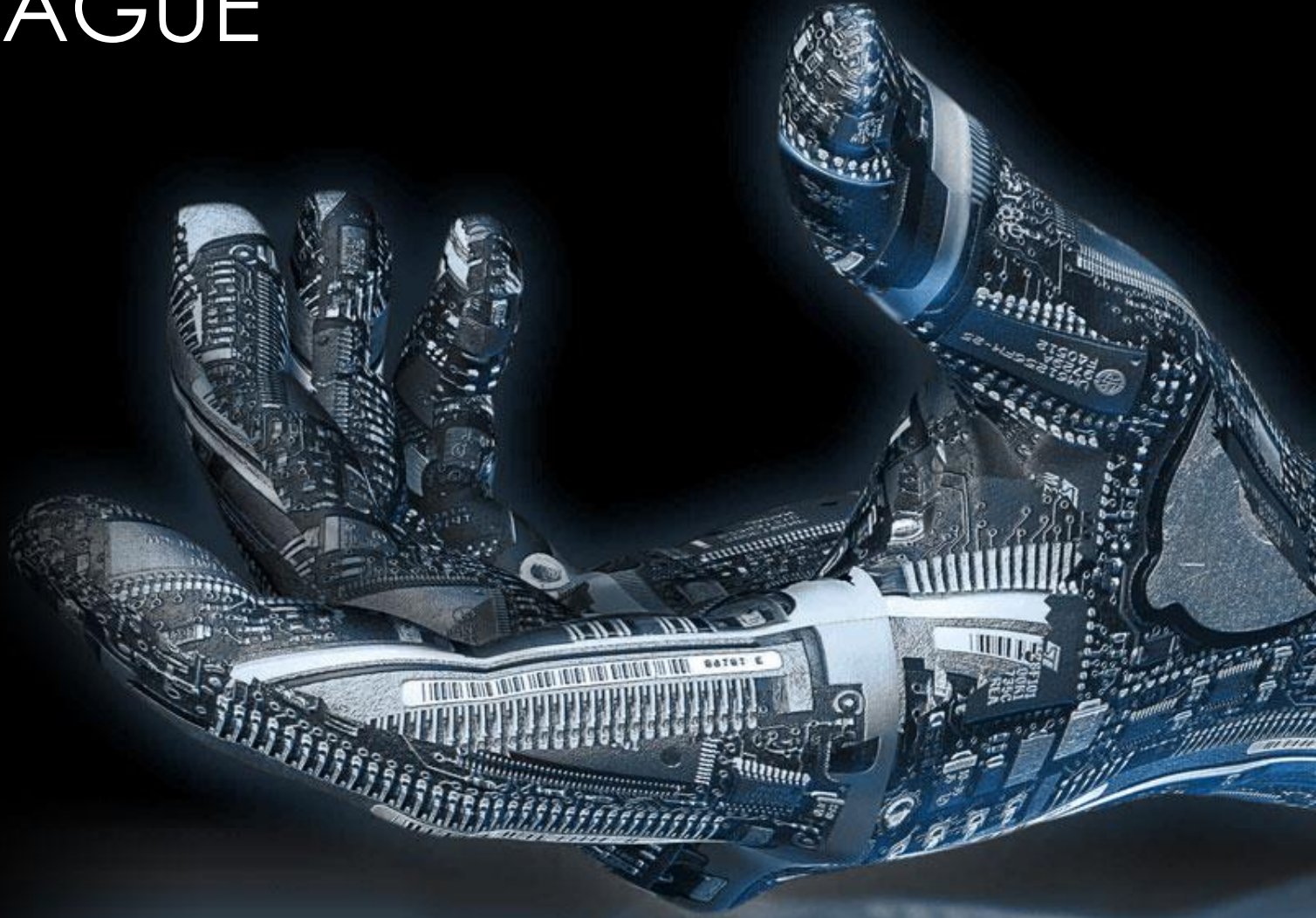
*We must
never stop
asking
“Why?”*



“If we do not wish to visualize people as sources of problems and machines as sources of solutions, then we need to consider machines and devices as cohabitants of this earth”

Ursula Franklin

OUR NEW COLLEAGUE





The DOCTOR

<http://voy.trekcore.com/gallery/thumbnails.php?album=276>



The ROBOT: ZORA

<https://yellrobot.com/zora-robot-companion-dementia-nursing-healthcare/>



Messages



Camera



Weather

What can I help you with?



AMS Healthcare call to action

A call for healthcare professionals, educators, and policymakers to ensure that technologies are held accountable to healthcare's compassionate purpose



*Now its your
turn...*



@BDHodges1

