Efforts to Promote Diversity and Inclusion in Clinical Trials

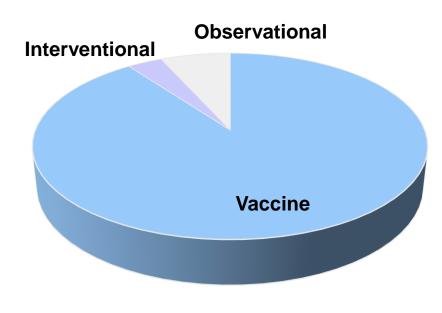
Angela Branche, M.D. Assistant Professor of Medicine Division of Infectious Diseases



Lessons from the COVID 19 Pandemíc....



URMC Infectious Diseases Division COVID-19 Studies



- 1. Natural History Studies:
- CEIRS COVID Surveillance and Immunity Study
- COVID Gene Expression
- 2. Therapeutic Trials:
- ACTT¹⁻⁴ Remdesivir
- ACTIV 2 Monoclonal Ab
- 3. CoVPN Vaccine Studies
- Pfizer
- Astrazeneca
- Moderna
- Sanofi



Therapeutic Trials

Adaptive COVID-19 Treatment Trial (ACTT)

ACTT-1: Remdesivir vs. standard of care (SOC)

 Status: Completed, preliminary results published in NEJM May 22, 2020

ACTT-2: Remdesivir +/- Baricitinib

- Status: Closed enrollment 6/30 (1034 participants)
- Full analysis late September
- ACTT-3: Remdesivir +/- IFN beta-1a
 - Enrollment began August 5



	Study Description	Funding	Ν	Age	Sex	Race/Ethnicity
Acute COVID	A descriptive study of the pathogenesis and	NIH	8	18-49 years = 5	Male $= 3$	Black = 1
Natural History	immune response to SARS-CoV-2 during				Female $= 5$	White $= 7$
Study	2020 COVID-19 pandemic in adults, children,			50-64 years = 3		
	and the elderly					NH = 8
Whole Blood	Adults ≥ 18 years of age either hospitalized or	NIH	54	18-49 years = 16		Asian = 1
Transcriptomic	recruited from the community with symptoms				Male = 28	Black = 17
Analysis of	compatible with COVID-19. Whole blood			50-64 years = 13	Female $= 26$	White $= 32$
Acutely Infected	samples were collected to if assess gene					Unknown = 3
COVID19	expression in the blood of patients with mild			\geq 65 years = 24		
	to moderate vs severe COVID-19 might					Hispanic $= 2$
	identify path clues to disease pathogenesis					NH = 52
	and discover new gene targets amenable to					
	potential therapeutic interventions.					
ACTT1-4	Placebo controlled Phase 3 therapeutic trials	NIH	70	18-59 years = 23	Male = 38	Asian = 2
(Adaptive	in COVID19 acutely infected hospitalized				Female $= 32$	Black = 19
COVID19	subjects.			≥ 60 years = 47		White = 49
Therapeutic Trial)						
						1 Hispanic
						69 NH



The NEW ENGLAND JOURNAL of MEDICINE

Perspective

Racial Disproportionality in Covid Clinical Trials

Daniel B. Chastain, Pharm.D., Sharmon P. Osae, Pharm.D., Andrés F. Henao-Martínez, M.D., Carlos Franco-Paredes, M.D., M.P.H., Joeanna S. Chastain, Pharm.D., and Henry N. Young, Ph.D.

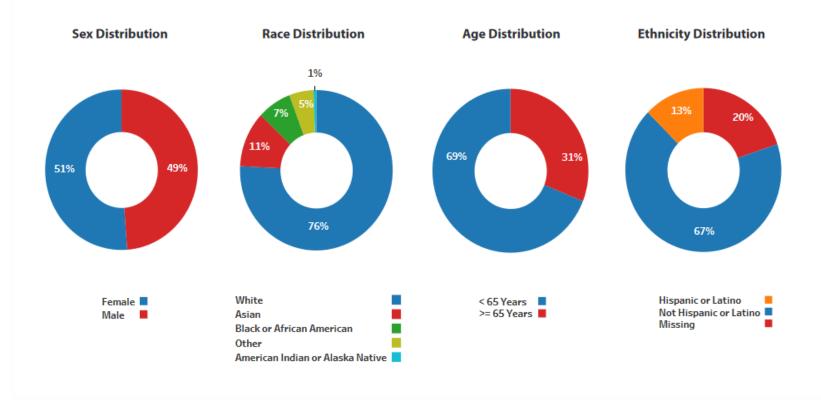
- Black Americans ac-counted for only about 20% of the 1063 patients in the placebo-controlled Adaptive Covid-19 Treat-ment Trial (ACTT-1) funded by the National Institute of Allergy and Infectious Diseases (NIAID)
- The proportions of Latinx and Native American patients were provided only for ACTT-1 and were 23% and 0.7%, respectively



Demographics of Trial Participation

Demographic Categories

Clinical trial participation is broken down into four categories: sex, race, age, and ethnicity. *



https://www.fda.gov/drugs/drug-approvals-and-databases/drug-trials-snapshots



UNIVERSITY of ROCHESTER

Sex, Race, and Age Participation by Therapeutic Area

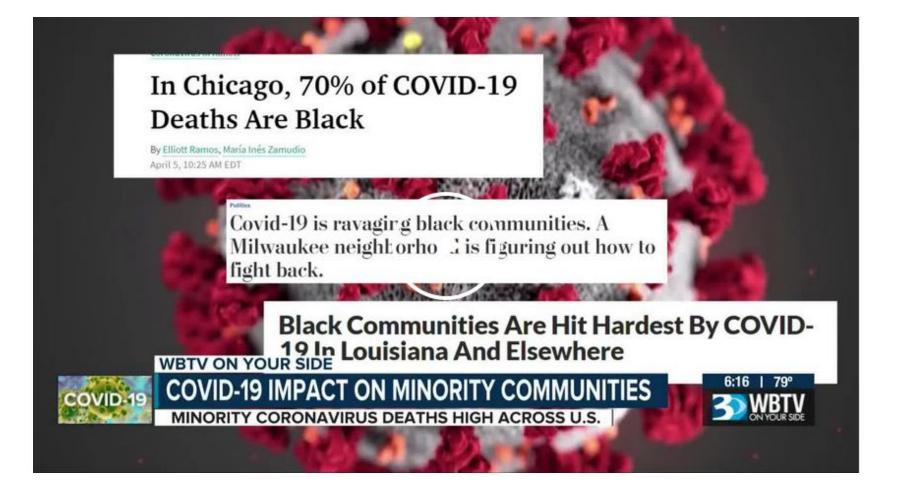
Presented below is the cross-section of sex, race, and age categories in therapeutic areas with the highest numbers of participants.

		Cardiovascular Diseases		Endocrinology and Metabolism		Oncology and Hematology		Infectious Diseases		Neurology	
		< 65 Years	>= 65 Years	< 65 Years	>= 65 Years	< 65 Years	>= 65 Year	< 65 Years	>= 65 Years	< 65 Years	>= 65 Years
	White	79%	84%	72%	79%	71%	82%	67%	83%	75%	51%
	Asian	14%	11%	20%	15%	14%	9%	9%	7%	14%	47%
Male	Black or African American	3%	2%	5%	3%	5%	2%	17%	8%	5%	1%
	Other	4%	3%	3%	3%	10%	7%	6%	1%	5%	<1%
	American Indian	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	<1%

		Cardiovascular Diseases		Endocrinology and Metabolism		Oncology and Hematology		Infectious Diseases		Neurology	
		< 65 Years	>= 65 Years	< 65 Years	>= 65 Years	< 65 Years	>= 65 Year	< 65 Years	>= 65 Years	< 65 Years	>= 65 Years
	White	73%	84%	71%	78%	70%	85%	65%	83%	82%	56%
	Asian	16%	10%	17%	14%	16%	8%	9%	8%	6%	41%
Female	Black or African American	6%	2%	7%	5%	5%	2%	18%	6%	8%	2%
	Other	5%	4%	4%	3%	9%	5%	7%	2%	3%	1%
	American Indian	<1%	<1%	1%	<1%	<1%	<1%	1%	1%	1%	0%

https://www.fda.gov/drugs/drug-approvals-and-databases/drug-trials-snapshots

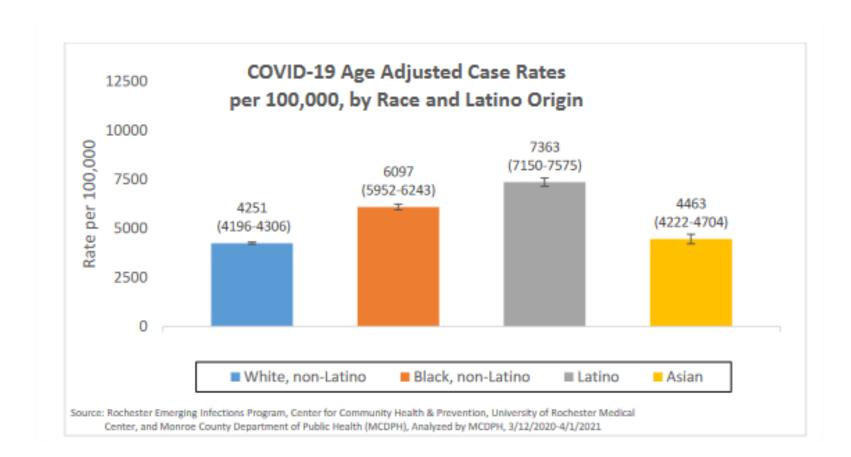






Monroe County COVID-19 Surveillance, Preliminary Data as of April 1,2021

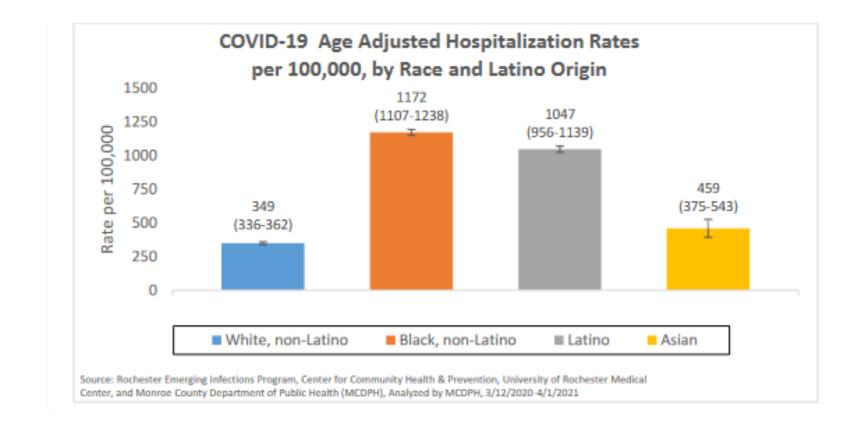
Rochester Emerging Infections Program, Center for Community Health and Prevention





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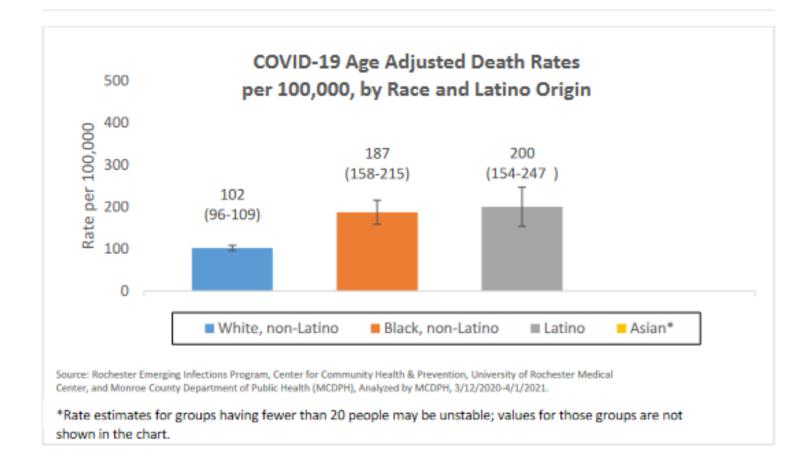
Rochester Emerging Infections Program, Center for Community Health and Prevention





Monroe County COVID-19 Surveillance, Preliminary Data as of April 1,2021

Rochester Emerging Infections Program, Center for Community Health and Prevention





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Covid-19 Vaccine Trials Have a Problem: Minority Groups Don't Trust Them

Drug companies, U.S. agencies work with churches and community activists to educate about benefits of vaccination



Why is it difficult to achieve diversity and inclusion in clinical research?



Attitudes and Beliefs of African Americans Toward Participation in Medical Research

Giselle Corbie-Smith, MD, Stephen B. Thomas, PhD, Mark V. Williams, MD, Sandra Moody-Ayers, MD

- Thirty-three African-American adults presenting to an urban public hospital for outpatient medical care participated in one of five focus groups.
- The majority of focus group participants tended to be in favor of medical research, as long as they were not "guinea pigs."
- Expressed concerns about participation in medical research included, but were not limited to:
 - (1) inconvenience—interfering with work schedules, restriction of normal behavior
 - (2) too much risk, particularly infection with unknown viral agents
 - (3) fear of injections and needle
 - (4) concerns about whether physicians would be fully honest with them about risks and procedures
 - (5) failure to see any need, given current good health
 - (6) concern that even if something good came out of the research, African Americans would not necessarily benefit because of racial discrimination and poverty

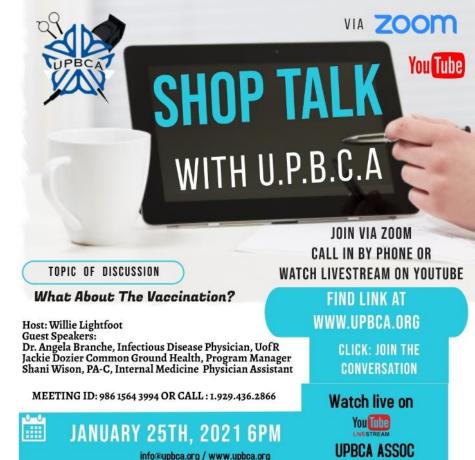


Community Engagement Studio July 23, 2020

- 1. How can we reach individuals who are at higher risk for COVID19 infection and underrepresented in research (racially, ethnically, socioeconomically, etc), and who may have an interest in participating in our study?
 - A. Venues of engagement?
 - B. Methods of engagement?
- 2. What barriers to signing up can we address from individuals in underrepresented communities which may prevent participation?

Venues

- Collaboration with community organizations and faith-based organizations and groups
 - Black Physicians Network
 - Black Nurses Association
 - Common Ground Health
 - Latino Health Coalition
 - African American Health Coalition
 - Home health agencies
 - Promotores de Salud
 - Latinas Unidas
- Social media
- Historically Black fraternities and sororities (D9)
- Barber shops, beauty salons
- Mobile health unit
- Shelters and homes for homeless





Methods

- 1) Presentations by researchers of color and ensure cultural competence and integrity
- 2) Vet messages in advance offensive vs. attractive
- Enter each interaction with willingness to understand peoples perceptions and speak to these
- 4) Be prepared for longer conversations
- 5) Ensure relevance and value to community

"WIFM" – "What's in it for me"

- 6) Anticipate questions and come prepared with answers
- 7) Identify influencers within the community to work with on communication and outreach



Participants Needed for COVID-19 Research

BRING Roc Back

Vaccine Study Facts





URMC Employee Vaccination

	UR Medicine
Eligible for Phase 1a Vaccine	21,733
Received Vaccine	17,555 (81%)
Scheduled for Vaccine	826 (4%)
Declined Vaccine	3,352 (15%)

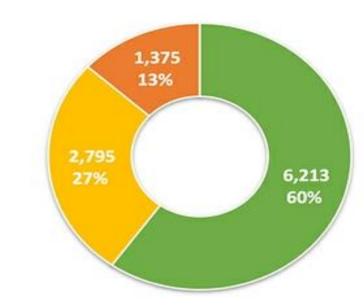
<u>URMC Town Halls (12/11 and 12/14)</u>

- Faculty and Staff

- Ancillary Services

Result: (majority of URMC employees)

- Nursing



- Would take vaccine when available to them
- Unsure if they would take vaccine at this time
- Would not take vaccine at this time



Barriers

- 1. Trust is a big issue.
- 2. Researchers of color sharing their personal stories
- 3. Transparency is needed. Ensure concise, direct answers with important information, even if it's not the information the individual might want to hear.
- 4. Language and cultural deprivation. Communicating in their language will help to break down barriers.



5. Places where people gather, like health fairs, could be garnering only the same few people instead of reaching a wider, more diverse audience.













Community members gather by household in "bubbles" for a training session as part of an outreach program to the Black community to increase vaccine trial participation in Rochester, New York, U.S., November 14, 2020.

