

NDSU

RESEARCH AND CREATIVE ACTIVITY

STUDENT FOCUSED • LAND GRANT • RESEARCH UNIVERSITY

COLLEEN FITZGERALD, PhD

NDSU Vice President for Research
and Creative Activity



THANK YOU

NDSU

RESEARCH AND CREATIVE ACTIVITY

TOP 100

Among all U.S. public universities

R1

Doctoral university – “very high research activity”

FY23

expenditures

\$190.3 million – all time high; 5th straight record

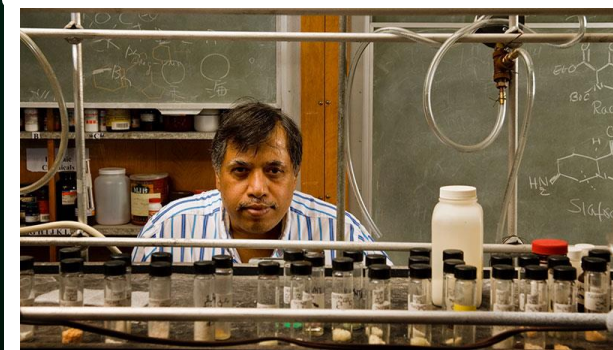
FY24

awards

\$142.5 million
all time high

Federal Awards

\$ 36.1M	NSF	145%	
\$ 32.2M	USDA	57%	
\$ 17.1M	DoD	68%	
\$ 8.7M	NIH	15%	



Why the Funding Matters

- Catalyst for innovation
- Collaborative investments
- Industry partnerships
- Seed programming
- ND higher education collaborations
- Workforce readiness
- Leverages other resources

NDSU Innovations to Practice Program

Investments focused on the development and expansion of public-private partnerships across NDSU's strategic focus areas



**INFRASTRUCTURE
PROGRAM
(IP)**

**6 PROJECTS
\$566K**



**FACULTY
DEVELOPMENT
PROGRAM
(FDP)**

**13 PROJECTS
\$694K**



**TECHNOLOGY
ACCELERATION
PROGRAM
(TAP)**

**9 PROJECTS
\$786K**



**EXPERIENTIAL
LEARNING
PROGRAM
(ELP)**

**4 PROJECTS
\$256K**

The University Collaboration Research Program

NDSU and UND invested \$400k to create the UCRP program.

Nine projects are supported (four led by NDSU and five led by UND).

NDSU NORTH DAKOTA STATE UNIVERSITY

UND UNIVERSITY OF NORTH DAKOTA

NDSU SCIENCE CENTER

Mayville State University

DICKINSON STATE UNIVERSITY

VALLEY CITY STATE UNIVERSITY

MINOT STATE UNIVERSITY

NHS COLLEGE
NUETA
HIDATSA
SAHNISH

CANKDESKA CIKANA COMMUNITY COLLEGE

UNITED TRIBES TECHNICAL COLLEGE

TURTLE MOUNTAIN COMMUNITY COLLEGE

Lake Region State College

NDSU

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Transparency

NDSU.edu/research/edrf





PARTNERSHIPS

TRANSLATION

WORKFORCE

NDSU

RESEARCH AND CREATIVE ACTIVITY

RYAN MCGRATH, PhD

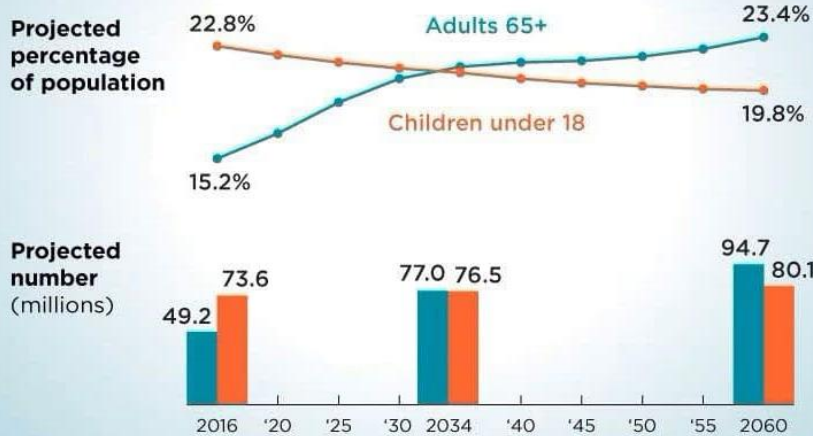
NDSU Associate Professor
of Health, Nutrition, and Exercise Sciences



An Aging Nation

Projected Number of Children and Older Adults

For the First Time in U.S. History Older Adults Are Projected to Outnumber Children by 2034



Healthy Aging



UCRP

NDSU NORTH DAKOTA STATE UNIVERSITY



UND UNIVERSITY OF NORTH DAKOTA



Asozo Health Sciences

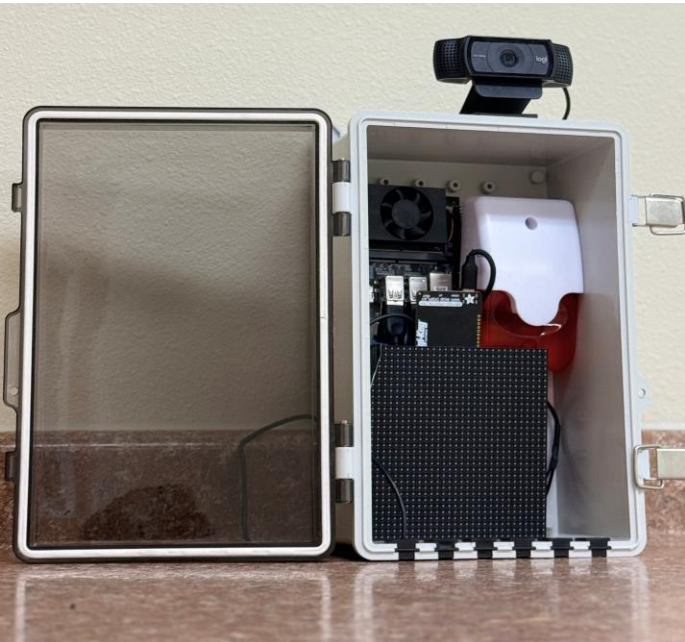
ARMSTRONG ABOAH, PhD

NDSU Assistant Professor of
Transportation Engineering

DEVELOPMENT OF AN IOT-BASED SENSOR FOR ADVANCING SAFETY MONITORING AND INTERVENTION AT WORK ZONE AREAS

PI: Armstrong Aboah, Ph.D. Co-PI: Umamaheswara Rao Tida, Ph.D.

Our Developed Workzone device



Stage 1: Visual Alert



Stage 2: Audio Alert



Impact of EDRF

Work Force Development

Supported 9 (7 grad, 2 undergrad) students



Industrial Partnership

Partnership with UGPTI and NDDOT



Research Expansion

HIGH priority Federal Grant on Workzone Safety to be submitted on 7th March 2025.

\$2M max per award