Survey Results

The Center for Heart and Vascular Research
Needs Assessment
2019

Survey was open from June 5 – July 2, 2019.

95 members of the Center for Heart and Vascular Research including the Steering Committee were invited to participate

55 responses were received
1. Tell us about you.

Rank

- Instructor
- Assistant Professor
- Associate Professor
- Professor
- Other
1. Tell us about you.

<table>
<thead>
<tr>
<th>Department/Division</th>
<th>Count</th>
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<tbody>
<tr>
<td>Anesthesiology</td>
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<td>Biochemistry</td>
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<td>Biomechanics</td>
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<td>Biostatistics</td>
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<tr>
<td>Cellular and Integrative Physiology</td>
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<td>College of Nursing</td>
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<tr>
<td>EPI (Epidemiology)</td>
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<tr>
<td>Health Promotion</td>
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<tr>
<td>Health Services Research and Administration</td>
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<tr>
<td>Internal Medicine (Cardiology, Rheumatology)</td>
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<tr>
<td>School of Health and Kinesiology</td>
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<td>Surgery (Cardiothoracic, Vascular)</td>
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<td>UNL Vet. Medicine</td>
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<td>UNL</td>
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<td>Unlisted</td>
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<td><strong>Total</strong></td>
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</table>
1. Tell us about you.

Do you affiliate with any other centers or programs

- Buffet Cancer Center
- Cellular and Integrative Physiology (CIP)
- Center for Collaboration on Research Design and Analysis (CCORDA)
- Center for Drug Delivery & Nanomedicine (CDDN)
- Center for Integrated Biomolecular Communication (NCIBC)
- Center for Patient, Family, & Community Engagement in Chronic Care Mgmt (CENTRIC)
- Center for Reducing Health Disparities (CRHD)
- Center for Research in Human Movement Variability (MOVCENTR)
- Central States Center for Agricultural Safety and Health (CS-CASH)
- Certified Professional in Patient Safety (CPPS)
- Child Health Research Institute (CHRI)
- Children's
- Clinical Research Center (CRC)
- Critical Care
- GP IDeA CTR/ IDaE-CTR
- Gretchen Swanson Center for Nutrition
- Heart and Vascular
- ID (Infectious Diseases)
- Internal Medicine/Cardiovascular Medicine
- Nanomedicine
- Nebraska Center for Materials and Nanoscience UNL (SCMN)
- Nebraska Center for Substance Abuse Research (NCSAR)
- Nebraska Center for the Prevention of Obesity Diseases- UNL (NPOD)
- Nebraska Center for Virology (NCV)
- Neuroscience
- Oncology
- Peter Kiewit Institute UNO
- Pharmacy
- Pulmonary
- Redox Biology Center UNL
- Regenerative Medicine
- UNL
1. Tell us about you.

What stage are you in your career

- Early
- Middle
- Later
1. Tell us about you.

What type of research do you perform

- **T0 - Preclinical**: Investigates the movement of fundamental discovery into health application, including use of human samples, data and validation.
- **T1 - Translation to patients**: Develops health applications with implications for evidence-based practice.
- **T2 - Translation to practice**: Investigates the movement of evidence-based guidelines to health practices.
- **T3 - Translation to communities**: Investigates the impact of evidence-practice and policies to population health impact/investigators providing communities with the optimal intervention.
2. Barriers for accomplishing research

The following are listed from most of a barrier to least:

1. Money to do the project
2. Administrative paperwork to get research protocol approved through all the channels
3. Additional FTE support (technical, data abstractors)
4. Time to do the research
5. Ideas to work on

Comments:
- access to high quality of human samples
- The regulatory paper work is out of hand. CM watches us like a hawk. No flexibility to do anything quickly related to animals.
- Knowing which clinical scientists are interested in collaborating
- Lack of true collaborations with serious researchers
- Comparative medicine
- Project management for early career investigators
3. Rate your interest

The following are listed from strongest interest to least:

1. Peers to talk with about my research
2. Clear single resource to obtain details on funding opportunities
3. Opportunity to get experience with a successful team
4. Senior faculty to talk with about how to navigate academics
5. Peers to talk with about how to navigate academics
6. Instructions and guidelines for every step in the research process
4a. Aware of available programs

Were you aware of the following provided by the Professional Development Core or the Pilot Program of the Great Plains Clinical and Translational Research Network (IDeA-CTR)?

- **Pilot grants**
  - Yes
  - No

- **Monthly research seminars**
  - Yes
  - No

- **Research Studios**
  - Yes
  - No
4b. Aware of available programs

Were you aware of the following provided by the Mentored Scholars Program at UNMC?

Masters in Clinical & Translational Research

- Yes
- No

PhD in Clinical & Translational Research

- Yes
- No
5. Helpful instructions/guidelines

The following instructions, how to guidelines and checklists were identified as helpful to have (listed from very helpful to not helpful):

1. statistical support for grant writing
2. find funding opportunities
3. write grants
4. develop databases (e.g. RedCap)
5. access databases or tissue
6. analyze data
7. design studies for different types of translational research (pre-clinical to implementation science)
8. conduct database analysis
9. perform systematic literature reviews
10. how to work with cores
11. formulate evidence tables
12. develop logic models
13. obtain IRB approval for your study
14. prepare manuscripts or abstracts
15. best practices for sample collection or biobanking (animal to human)
16. obtain IACUC approval for your study
17. run a research study
18. set up a lab
6. Research Groups

Gauge your interest in the following research groups (from highest interest to slight/no interest):

1. cardiac interventions (non-surgical)
2. obesity/ diabetes
3. imaging
4. inflammation/ immunity
5. outcomes research (epidemiology, pharmacoepidemiology: medical and surgical)
6. physical activity promotion
7. risk reduction
8. cardiopulmonary
9. peripheral artery disease
10. cardiorenal
11. disparities
12. fibrosis/ extracellular matrix
13. macrophage
14. surgical interventions
15. neuromodulation
16. trauma
17. infectious diseases

Other suggestions:
- cross roads between systemic inflammatory disease and cardiovascular disease risk
- Atherosclerosis (general)
- Regeneration
- Clinical Informatics and Artificial Intelligence
7. Pilot Programs to Prioritize

All three choices for pilot programs were highly rated (from definitely should include to could include):

1. Cross-campus applications
2. Cross-discipline applications
3. Applications from postdoctoral and clinical fellows

Comment:
Without question, the top priority should be given to applications that include clinical and basic scientists
8. Statistical analysis

Which would most help you with statistical analysis for your studies (from most helpful to least):

1. Access to a statistician
2. A list of the top 10 most commonly used statistical tests used in CV research with example templates and analysis
3. Formal training in statistics
4. Access to work stations with statistical analysis software provided

Comments:
- Experience and expertise available in novel statistical approaches for different types of research (i.e. basic vs. clinical-epidemiologic)
- For access to a statistician, let me qualify by saying for complex things an appropriate statistician
9. Grant writing

For writing grants, which of the following would be most useful to you (from most useful to least):

1. Grant editor
2. Providing examples & templates of all the non-research plan parts (budget and justification, biosketch, facilities)
3. Establishing writing teams that meet regularly to provide feedback and keep each other on a checklist schedule
4. Availability of a writing specialist
5. Grant boot camp - starts 9 months before NIH deadline & ends a week before the grant is due
6. Online library of successful R01s
7. Once a year writing retreats
8. Online grant writing seminars

Comments:
• Would be helpful to have a group review of specific aims of a planned grant between 3-5 months before deadline?
• Grants specialist to help pull together all components of large grants (e.g., R01s or larger)
10. Manuscript writing

For writing manuscripts, which of the following would be most useful to you (from most useful to least):

1. Availability of a writing specialist
2. Best practices for figures reproducibility
3. Establishing writing teams that meet regularly to provide feedback and keep each other on a checklist schedule
4. Providing examples & templates of all the non-research plan parts (budget and justification, biosketch, facilities)
5. Journal club
6. Once a year writing retreats
7. Online manuscript writing seminars

Comments:
- Forming manuscript clusters: https://ilearn.unmc.edu/increasing-productivity-manuscript-clusters/
- It's not that all of these wouldn't be helpful. It's just a time factor.
- Need access to illustrator badly
11. Data discussions

For data discussions, I prefer (from most prefer to least):

1. Seminars - held during the day M-F
2. Speed journal club - 10 articles discussed over the hour, to put each article in context of the field; would also be the 1st step in outlining a review article
3. Chalk talks- held over dinner once a month where a center member reviews their research using only a white board
4. Regular journal club - 1 article discuss over an hour
5. Science café with the general public
6. Mini-medical school with the general public

Comment:
• I think gatherings with the general public is a GREAT idea. However, I would not use those forums as ways to generate new ideas/collaborations. The other options are more suitable for that.
12. Mentoring Symposium Series

Are you interested in a mentoring symposium series?

Which seminars for a mentoring symposium series would be appealing (from most appealing to least)?

1. Ways to set priorities and increase efficiency
2. When to say yes and how to say no
3. How to mentor
4. How to be mentored
Final Thoughts

Is there anything else you would like us to know?

• I think it would a good idea to set up several 'how to' sessions for members. These can be techniques session, hands on plus theory. For example, how to use and analyze proteomic and RNA seq data. How to use intravital microscopy. How to measure cardiac function., etc.

• Many of these are 'nice' ideas. The biggest problem in implementation is the fact no one has the time. So, even if implemented way too many of us are already overextended. Clinical faculty (with RVU's) are really under the gun. Have no answers, this is just a problem.

• These are the most important needs (and current barriers) for effective CV research at UNMC: 1. PROTECTED research time 2. Research support staff: CV-experienced statistician, clinical research NURSE coordinators (specifically need nurses, not just any people) 3. IRB reform: UNMC IRB is OUT OF CONTROL -- petty, extremely obstructive, and unconscionably slow; IRB all but prevents participation in multicenter research 3. Incentives for successful research (earn more projected time, research money, salary bonus, academic/professional titles, etc.)

• For some questions, I answered what I expect that others may need. For example, i) 'set up a lab' is not applicable for me. It would be good if you add 'N/A' column for some questions. ii) I analyze data myself so I do not need help for data analysis. However, I believe majority of researchers would need help for data analysis.

• Helping to connect UNL and UNMC/UNO would be very beneficial. I want to work more with Omaha based researchers, but it is difficult to break into. Having Zoom for all seminars and small group meetings would be really nice/useful.

• Please be careful not to waste time duplicating current on-campus professional development efforts or resources.
Final Thoughts continued

Is there anything else you would like us to know?

• Need more access to stats and illustrators/artists
• This survey is excellent to cover everything what I thought :)
• I am so excited for this to get going!
• Good we are doing this, happy to help
• thanks for taking this on!
• This survey was designed incredibly well!
• Good luck in this amazing endeavor! Always available and willing to help.

Full results are available on the CHVR website – www.unmc.edu/chvr