

NDSU INFORMATION TECHNOLOGY

Delivering core solutions and propelling innovation

TECHNOLOGY FEE ADVISORY COMMITTEE MEETING

Monday, March 25, 2019, 10 a.m.

Quentin Burdick Building 206E

MEETING NOTES; MEETING CONTINUED AND CONCLUDED ON 4/2/19 (starting on p. 5)

Present: Anne Denton, Chair; Mari Borr, Stephanie Day, Jeff Dertinger, Jerry Gao (at 10:18 a.m.), Ian Gilley, Nathan Kaiser, Ben Mach, Marisa Mathews, Micah McGowan (proxy for Melissa Stotz starting at 10:50 a.m.), Kenfrey Mbuba, Adam Muske, Jordan Nitsch, Melissa Stotz (until 10:50 a.m.), CeCe Rohwedder

Unable to attend: Michael Russell, David Wittrock

1. Members were welcomed, and introductions were conducted.
2. ***M to approve the notes of the 10/8/18 meeting as presented (Mari/Melissa); MSC.***
3. Consideration of funding the action plans received with the \$50,000 available this academic year:
 - A. **#1901, “Video Production Switcher System/Closed Captioning.”** Stephenson Beck, Communications. Requested: \$30,436.40.
 - Review: Adam reported that this project would increase accessibility and improve content. Partial funding could possibly fund the closed captioning feature.
 - ***M to fund #1901 at zero (Nathan/Adam).***
 - Discussion: only a small group of students would benefit, and the improvement would not be significant. BIN has other funding options. ***M to end discussion (Ian/Nathan). MSC.***
 - ***Vote on M to fund #1901 at zero. MSC unanimously.***
 - B. **#1902, “Custom 3D Scanner.”** Ben Bernard, Architecture & Landscape Architecture; Jessie Rock, Geosciences; Jeremy Straub, Computer Science; David Swenson, Visual Arts. Requested: \$18,800.00.
 - Review: Ian presented Michael Russell’s review notes (Attachment A). There are significant matching funds available. This project would be useful for Art and Engineering students.
 - ***M to fully fund #1902 at \$18,800.00 (Ian/Stephanie).***
 - Discussion: it is a highly innovative project with broad applicability to students, and it is in the same track as other projects that have been approved. The project is important to implement at this time because there is a doctoral student now who has the knowledge to make it work, though this should not influence the funding consideration, as the machines

should come with the necessary software. It is expected that once the scanner has been set up, it would not be difficult to maintain and support. There was a question of how the project would benefit students in all of the disciplines represented by the project directors, such as ALA and Geosciences. Members wondered if the scanner at Renaissance Hall would be the same as the one installed at Makerspace. There was a question about how/whether students will be able to use the scanners at any time. Does the investment hinge upon a single individual? There was also a question of ongoing expenses: what all is included in maintaining the software?

- ***M to table further discussion until the questions presented have been answered by the project directors (Ian/Nathan). MSC.***

C. **#1903, “Smart Boards in Library Study Rooms.”** Trevor McNeil for Student Government. Requested: \$7,285.00.

- Review: Ken reported that the request is for one smart board, with St. Gov’t providing matching funds for a second smart board.
- Adam left the meeting during the discussion in the next section.
- ***M to open discussion (Ken/Marisa). MSC.***
- Discussion: due to the popularity of the smart boards, more would be added in the future, with the second smart board purchased by Student Government. Refresh costs will be assumed by the IT Division. This is a project that would impact a lot of students and being proposed by students through Student Government. There would be a broad application among the students. Smart boards are already used in classrooms, and using them is quite intuitive, so there are no concerns about training. It is uncertain whether remote participation is an option, but its purpose is for in-person use. It was suggested that the smart boards be so set up as to prevent damage. There was a suggestion to propose to Student Gov’t to install the one they are willing to fund, gauge usage and impact, and then determine if TFAC should fund a second.
- Adam was invited back to the meeting and asked why two smart boards should be installed right away instead of just one; he replied that IT scheduling would benefit installing two at the same time. Adam was asked why this particular model was selected. He said cheaper models don’t offer the same touch software; Student Gov’t bought a cheaper model and did not find it very useful for class work.
- ***M to table the vote (Nathan/Ian). MSC.***

D. **#1904, “Loanable Mac Computers for Student iOS and MacOS Application Development Projects.”** Alex Radermacher, Computer Science & Operations Research. Requested: \$2,337.00.

- Review: at 10:20 a.m., Jerry reviewed the project, noting that it is a good idea, as it would balance use of both Macs and PCs. The proposal targets a narrow population area, but the concept is to increase the support need/atmosphere of use of additional technologies.
- ***M to fully fund #1904 at \$2,337.00 (Jerry/Jordan).***
- Discussion: this project directly impacts the academic nature of students. There is a match provided. Three letters of recommendation accompanied the proposal, which points to the level of support. The department should cover maintenance and refresh costs.
- ***M to table the vote (Ian/Stephanie). MSC.***

E. **#1905, “Theatrical Lighting Modernization.”** Mark Engler, Theatre Arts. Requested: \$44,800.00.

- Review: Ian provided a review of the project. It would benefit 100 Theatre students as well as the 1,000+ people who attend productions every year.

- ***M to fund #1905 at zero (Ian/Adam).***
 - **Discussion:** The project is not innovative and does not adequately benefits the student body in proportion to its cost. It should be part of a capital improvement fund. The department is already receiving student fees.
 - ***MSC unanimously.***
- F. **#1906, “Development of an NDSU Campus eSports Lab.”** Paul Wraalstad, Memorial Union. Requested: \$37,659.00.
- **Review:** Stephanie stated that this project would boost student morale by providing an additional recreational opportunity; also, this is an industry that is growing rapidly.
 - **Discussion:** this is something that could be used and watched by a lot of people. If these are not high-end gaming computers, so they may not be the best for the purpose; there was curiosity about why it was determined that 17 machines would be needed. There are benefits for recruitment, retention and camaraderie, and this is an activity/program that will consistently grow, both as a varsity and as an intramural sport. Letters of commitment to, and support of, the project and the equipment proposed by the campus gaming clubs would be helpful to the committee.
- G. **#1907, “Cloud Computing Services for NDSU Education & Research.”** Kim Owen, IT Division. Requested: \$25,000.00.
- **Review:** Jordan reviewed the project. It would benefit 62-100 students and faculty. Matching funds would be provided by Biosystems Engineering and CCAST and College of Health Professions.
 - **Discussion:** we already use a form of cloud computing services on campus, so it is unclear why this is needed.
 - Further discussion was tabled.
- H. **#1908, “Spatial Data Visualization Lab.”** Hallie Pritchett, NDSU Libraries; Bernhardt Saini-Eidukat, Stephanie Day and Peter Oduor, Geosciences. Requested: \$27,921.60.
- **Review:** Marisa reported that this lab would be housed in two rooms in the library, with a graduate student hired to provide support. Some of the software is already available on campus but only to individuals in specific disciplines; the lab would expand access.
 - Further discussion was tabled.
- I. **#1909, “Wellness Center Digital Marketing & Engagement Platform.”** Jeff Dertinger, Wellness Center. Requested: \$15,909.00.
- **Review:** Mari reviewed the project, which would directly impact students who access the facility. It would reduce the costs of print advertising. The Wellness Center will cover licensing costs after the first year.
 - Jeff Dertinger left the meeting during the following item.
 - ***M (Marisa/Jordan) to fund #1909 at zero.***
 - **Discussion:** It is an important project, but not sufficiently innovative. The department should prioritize the student fees it receives for these marketing and display purposes; funding it would set a precedent for similar purposes by other departments. The committee did the project would impact a lot of students and saw the music feature as good to have and something that would be appreciated by students – that feature could be submitted as a

separate proposal in another year. Partial funding for just the music feature costs about \$750, but it may be dependent on having the other features. It is a forward-looking project.

- ***M (Mari/Melissa) to table the vote until other proposals have been considered. MSC.***
- J. **#1910, “Digital Fabrication Lab Computer Cluster.”** Adam Elznic, NDSU Libraries. Requested: \$11,021.00.
- Review: Nathan recapped the project, which includes training sessions for students. This is a phase of a project similar to the math emporium. Matching funds are available.
 - ***M to fully fund #1910 at \$11,021.00 (Nathan/Marissa).***
 - Discussion: this proposal brings in the entrepreneurial aspect to digital fabrication. More supplies are needed to the existing digital fabrication lab to expand its impact. There was a question of how widely the lab is currently being used – however, the more resources that are available, the more usage there will be, and currently there is a bottleneck with students waiting to use the existing resources. Following this December’s usage review, if there is need for additional resources, the Library would fund such; the Library would also fund maintenance and refresh.
 - ***M to end discussion and vote (Nathan/Adam). MSC.***
 - ***Vote on the motion to fully fund #1910 at \$11,021.00. MSC unanimously. This proposal was retroactively removed from consideration for administrative reasons, as described on page 5.***
4. Changes to Action Plans (on Blackboard):
- A. #1805, ITS, “Accessibility for Hearing Impaired in Classrooms.” Request for extension approved on 10/17/18.
5. Action Plan reports:
- A. Status reports received since the last TFAC meeting (on Bb):
 - a. #1804, ITS, “Accessibility for student printers.” Scope change request, to increase the number of printers made accessible using the \$7,383.40 not used by #1805, and to change the completion date to 06/30/19, was approved on 01/17/19 (see item 5.B.b. below).
 - B. Completion reports received since the last TFAC meeting (on Bb):
 - a. #1507, Communication/Bison Information Network, “New Computers and Software for the NDSU TV Studio Classroom & Computer Lab.” Completion report approved on 10/17/18.
 - b. #1805, ITS, “Accessibility for hearing impaired in classrooms.” Completion report approved on 01/17/19. The \$7,383.40 awarded and not used was redirected to #1804 (see item 5.A.a above).
6. A one-hour meeting to continue the action plan review will be scheduled for 10 a.m. next Monday, 4/1/19. In the meantime, the questions posed today will be asked of the project directors by the primary reviewers.
7. Meeting paused at 11:32 a.m.

TECHNOLOGY FEE ADVISORY COMMITTEE MEETING

Tuesday, April 2, 2019, 11 a.m.
Quentin Burdick Building 206E

MEETING NOTES – approved via email on 4/17/19 (voting record is Attachment F)

Present: Anne Denton, Chair; Stephanie Day, Jeff Dertinger, Ian Gilley, Marisa Mathews, Kenfrey Mbuba, Adam Muske, Michael Russell, Melissa Stotz, David Wittrock; CeCe Rohwedder

Unable to attend: Mari Borr, Jerry Gao (voting by proxy, having submitted his vote electronically prior to the meeting – Attachment E), Nathan Kaiser, Ben Mach, Jordan Nitsch

1. Members were welcomed, and the 3/25/19 discussion resumed.
2. Continued consideration of funding the action plans submitted:
 - A. **#1902, “Custom 3D Scanner.”** Ben Bernard, Architecture & Landscape Architecture; Jessie Rock, Geosciences; Jeremy Straub, Computer Science; David Swenson, Visual Arts. Requested: \$18,800.00.
 - Ian recapped his discussion with the project director, which occurred after the 3/25/19 meeting (Attachment B).
 - B. **#1906, “Development of an NDSU Campus eSports Lab.”** Paul Wraalstad, Memorial Union. Requested: \$37,659.00.
 - Stephanie recapped her discussion with the project director, which occurred after the 3/25/19 meeting (Attachment C).
 - C. **#1909, “Wellness Center Digital Marketing & Engagement Platform.”** Jeff Dertinger, Wellness Center. Requested: \$15,909.00.
 - The primary reviewer’s follow-up note was reviewed (Attachment D).
 - D. **#1910, “Digital Fabrication Lab Computer Cluster.”** Adam Elznic, NDSU Libraries. Requested: \$11,021.00.
 - Melissa pointed out that this action plan was not signed by an IT consultant prior to submission. **This does not meet the submission requirements as specified in the Action Plan form instructions, therefore it is not eligible for consideration, and the funding recommendation of 3/25/19 for #1910 is changed to zero.**
 - E. **#1908: “Spatial Data Visualization Lab.”** Hallie Pritchett, NDSU Libraries; Bernhardt Saini-Eidukat, Stephanie Day and Peter Oduor, Geosciences. Requested: \$27,921.60.
 - Stephanie left the meeting.
 - Review: Marisa recapped the action plan. This is an innovative project that supports and furthers the concept of the digital fabrication lab that is already in use in the library; additionally, it is a campus-wide resource. It is a discipline-specific software, but it could be

used by most other disciplines. The budget includes salary for a graduate student who would provide instruction and support on the use of the software. There was a question of whether students would be compelled to go to this specific lab to use the software, especially when they have computer labs in the buildings of their disciplines.

- ***M to fund #1908 at zero (Michael/Ian). MSC unanimously.***
 - Stephanie returned to the meeting.
- F. **#1907, “Cloud Computing Services for NDSU Education & Research.”** Kim Owen, IT Division. Requested: \$25,000.00.
- ***M to fund #1907 at zero (Ian/Marisa).***
 - Discussion: this project is basically funding one license for one year, with no certainty that there will be funding available for the department to sustain the program with subsequent licensing. It is useful and would provide a number of capabilities, but the ability to transmit information between the various systems is questionable.
 - ***Vote: MSC unanimously.***
- G. **#1902, “Custom 3D Scanner.”** Ben Bernard, Architecture & Landscape Architecture; Jessie Rock, Geosciences; Jeremy Straub. Requested: \$18,800.00.
- ***M to fully fund #1902 at \$18,800.00 (Michael/Marisa).***
 - Discussion: this is an innovative project, and there is a need for it by several disciplines. There are other 3D scanning systems on campus, but none to this scale, though card access for students in disciplines other than ALA would need to be provided. We could fund one scanner now, gauge the impact and success of the project, and potentially consider a proposal for the second scanner through a subsequent submission or funded by the department; in this instance having the first scanner located in the library would make it more, and more easily, accessible to the entire campus. However, having the initial scanner located outside the main campus would express a spirit of inclusion of NDSU locations not in the main campus.
 - ***M to table the vote (Ian/Michael). MSC unanimously.***
- H. **#1906, “Development of an NDSU Campus eSports Lab.”** Paul Wraalstad, Memorial Union. Requested: \$37,659.00.
- ***M to fully fund #1906 at \$37,659.00 (Ian/Stephanie).***
 - Discussion: this is an innovative project that would benefit a lot of students, with a solid sustainability plan.
 - ***Vote: MSC unanimously.***
- I. **#1902, “Custom 3D Scanner.”** Ben Bernard, Architecture & Landscape Architecture; Jessie Rock, Geosciences; Jeremy Straub, Computer Science; David Swenson, Visual Arts. Requested: \$18,800.00.
- ***M to fund #1902 at zero (Ian/Michael).***
 - Discussion: this is a good project, but members agreed to designate the limited funds available to other projects.
 - ***Vote: MSC unanimously.***
- J. **#1909, “Wellness Center Digital Marketing & Engagement Platform.”** Jeff Dertinger, Wellness Center. Requested: \$15,909.00.
- Discussion: the biggest part of the request is to fund the app and license, at \$5,500, which

would serve as the foundation of the project. The Wellness Center could fund the music component and sustain the cost of the overall project going forward.

- K. **#1904, “Loanable Mac Computers for Student iOS and MacOS Application Development Projects.”** Alex Radermacher, Computer Science & Operations Research. Requested: \$2,337.00.
 - o ***M to fund #1904 at zero (Ian/Marisa).***
 - o Discussion: the IT Division loans out laptops, but it is uncertain if Macs are available. This project does not meet the innovation criterion of the action plan funding program.
 - o ***Vote: MSC (1 opposed).***

- K. **#1903, “Smart Boards in Library Study Rooms.”** Trevor McNeil for Student Government. Requested: \$7,285.00.
 - o Adam left the meeting.
 - o ***M to fully fund #1903 at \$7,285.00 (Marisa/Michael).***
 - o Discussion: Ken reported that there are no statistics on use of existing smartboards, and Student Government has approved use of matching funds.
 - o ***Vote: MSC unanimously.***
 - o Adam returned to the meeting.

- L. **#1909, “Wellness Center Digital Marketing & Engagement Platform.”** Jeff Dertinger, Wellness Center. Requested: \$15,909.00.
 - o Jeff left the meeting.
 - o ***M to fund at \$5,056.00 (Ian/Melissa).***
 - o Discussion: the project director should be informed that the music app should be acquired.
 - o ***Vote: MSC (1 opposed).***
 - o Jeff returned to the meeting.

- M. Meeting adjourned.

Attachment A re #1902

Action Plan # 1902 Title: Custom 3D Scanner

Organization/Unit: Architecture & Landscape Architecture, Computer Science and Visual Arts

Project Directors: Ben Bernard, Jessie Rock, Dr. Jeremy Straub and David Swenson

Summary of Proposal:

What is it about? "The objective is to [do what] by [how] at a cost of [how much] within a clear timeframe [milestones]."

The objective of this project is to design and build two large 3D scanners. One will be set up in Renaissance Hall to be used by Architecture, Landscape Architecture and Visual Arts students and staff. The other will be deployed to a campus makerspace (still deciding where - potentially Library's Digital Fabrication Lab). Once the design is finalized, they will share it with other campus labs that wish to make their own. They are requesting \$18,800.00 total. They plan to build their first prototype over the summer of 2019 and test it during the school year with students and faculty, then finalize the design by the end of Spring 2020. They plan to have the second 3D scanner built and deployed by September 2020.

Analysis of Proposal:

Are the needs articulated? Is there evidence of feasibility study/research? Are the objectives clear/well-defined? Is the impact given? Is the project described in sufficient detail so readers can understand it? Do other peer institutions have similar projects to which this project can be compared, demonstrating that it meets best practices? What are the project's strong points? Why do I support it? What are the project's weak points? Why do I not support it?

The needs and objectives for this project are very clear and there appears to be a lot of research. A PhD Candidate, Pann Ajjimaporn, will be working on the software that will operate the scanner. They have built a scanner in the past that they are using as reference for improvements on the new design. NDSU does not currently have a large, high resolution 3D scanner available on campus so this would be the first. Over 500 students would have access to it each year. This will greatly benefit students because they will be able to scan their hand-built models so they can digitally preserve them. Student can also use the scans to create digital portfolios of the objects that can be viewed and manipulated using virtual reality. This project would be a great use of TFAC money. It is something that NDSU does not have, it is innovative, and it would be developed and tested by our students.

Budget:

Amount requested: \$18,800.00

Is the budget clearly justified? Is there evidence of unit contribution/match? Would the project be possible with partial funding?

Their budget is clear. They plan to contribute \$10,050.00 of their own money.

Attachment B re #1902

From Ian Gilley

4/1/19 Meeting with Ben Bernard re TFAC #1902

Summary:

I met with Ben Bernard and asked the following questions about the project. I do not feel that the project will have a single point of failure is the grad student in question goes elsewhere, because the amount of money requested to fund a grad student. My main concerns with the project are that I question if it was a wide enough application to be used by a significant portion of the student body. Design students, and interested engineering students is a pretty narrow band of a diverse student body.

1. Does the scanner depend on single individual?
 - a. No, (single point of failure) Dr. Jeremy Straab has also worked on this project previously. Ben can find additional computer science students to assist in the event that Pann is no longer available.
2. What are match funds? Actual project costs are about 50% of total request. (Request is \$18,800, with \$8000 in salary, \$1000 in materials, and 8,800 in equipment.
 - a. Student lab assistant staff and Ben will help. The \$8000 is for graduate research assistant (Pann). The other departments are chipping in time. By funding Pann, there is a good incentive for him to finish the project.
3. How is scanner superior to off the shelf options? (such as Ipad scanner)
 - a. Higher density point cloud and easier to use. Better than apps and more processing power.
4. Hardware does not typically age well, what is lifetime use?
 - a. Raspberry pi is pretty well built. Ben has previous experience with connecting Pi's to computers and 3D printers and they work well. Individual components are inexpensive. Art department could pick up those costs.
5. Are there any planned VR/AR applications?
 - a. There is a VR studio being built in Renaissance. Engineering and design students could use it for projects. It could be used to document art work in 3D.
6. What will be the user interface? Will it be easy to use by laypeople?
 - a. Will have a GUI and should essentially be, place an object, take a picture with all cameras, and receive a point cloud.
7. Who will have access, when?
 - a. Senior design or other groups could come up to renaissance to use the proposal. No cost for students to use the scanner.
8. How will it go to library?
 - a. Prototyping and working out bugs will happen at renaissance, then add to library makerspace. Or additional makerspaces (Ben is presenting to tech park soon) or Harris or Dunbar hall.

Attachment C re #1906

From: Day, Stephanie <stephanie.day@ndsu.edu>

Sent: Monday, April 1, 2019 1:23 PM

To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>

Subject: Re: Technology Fee Advisory Committee: TFAC action plan review: follow-up to 3/25/19 meeting

Below are the answers I found from the eSports people.

Why 17 computers?

These computers will be used for a class that is already being taught as well. The enrollment in the class is 15, so this would be the minimum number of computers for this facility (otherwise games would have to be licensed for QBB where the class is currently held and here). 17 was selected to ensure the teacher had a computer plus there was one extra just in case.

The price seems low?

The price was generated by IT and reflects a deal that came from the HP rep.

Hourly cost for students?

This isn't certain but they approximate that it will be \$3/hour for students with passes available. The public will pay slightly more maybe \$4-5/hour

Other topics we discussed:

games that will be hosted and who pays for them:

Hearthstone - Free

Dota2 - Free

Fortnight - Free

League of Legends - Free

Rocket League - purchased by HNES

FIFA19 - purchased by HNES

Madden19 - purchased by HNES

NBA2K - purchased by HNES

They believe that income will be generated just on admission, but also plan to host tournaments (Maybe 4 / year) in the ballroom which would also generate additional income.

They hope to also have a grad or intern position to support the lab.

They also believe the timing could put NDSU on the front edge of this as we would have the first eSports lab in the region.

Attachment D re #1909

From: Borr, Mari <mari.borr@ndsu.edu>

Sent: Monday, March 25, 2019 4:39 PM

To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>

Subject: Re: Technology Fee Advisory Committee: TFAC 4/2/19 meeting information

Hi CeCe,

Please pass this information on to the others at the TFAC meeting on 4/2:

One question asked was if it would be possible to just complete the music application portion of the proposal. I found that they would need to purchase at least one display and hardware in addition to the RockBot items to make this happen. For just the music, it sounds like it would be around \$2,500.

I also found that with FusionGO, students would be able to participate in courses from a distance (or from their dorm room). For example, I have a graduate student who lives in Connecticut and she would be able to take yoga classes offered at the wellness center through FusionGO. I do think that is a great benefit for the entire student population, as our distance students still pay the Wellness Center fees but aren't able to physically go to the Wellness Center. It may also be of benefit even to local students who aren't able to or aren't comfortable taking Wellness Center courses in person.

I am in favor of funding this proposal.

Thanks,

Mari

Attachment E from Jerry Gao re his vote, delivered by Melissa Stotz at his request

From: Stotz, Melissa <melissa.stotz@ndsu.edu>
Sent: Tuesday, April 2, 2019 10:50 AM
To: Gao, Jerry <jerry.gao@ndsu.edu>
Cc: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>
Subject: RE: vote at TFAC

Thank you! I will vote on your behalf.

Melissa Stotz
Learning and Applied Innovation Manager / Information Technology Services
NORTH DAKOTA STATE UNIVERSITY

From: Gao, Jerry <jerry.gao@ndsu.edu>
Sent: Tuesday, April 2, 2019 10:30 AM
To: Stotz, Melissa <melissa.stotz@ndsu.edu>
Cc: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>
Subject: Re: vote at TFAC

Melissa, I mistyped Wed - should be today.

My vote:

1902- depends on answer to that question - I can be the same with your judgement.

1903, 1904, 1906 - YES

1907, 1908, 1909 - NO

Thanks, Jerry

From: Stotz, Melissa
Sent: Tuesday, April 2, 2019 7:46 AM
To: Gao, Jerry
Cc: Rohwedder, CeCe
Subject: RE: vote at TFAC

Good Morning Jerry,

I would be happy to proxy your vote – however, I will need to know how you wish to vote on each proposal.

Melissa Stotz
Learning and Applied Innovation Manager / Information Technology Services
NORTH DAKOTA STATE UNIVERSITY

Hi, Melissa,

I have one faculty candidate being interviewed tomorrow (Wed), conflicting with TFAC meeting. Can you cast my vote?

Thanks, Jerry Gao

Attachment F

Record of voting on approval of meeting minutes via email, with 7 out of 13 voting members, and the chair, voting for approval of the meeting minutes as presented.

From: Day, Stephanie <stephanie.day@ndsu.edu>
Sent: Thursday, April 4, 2019 2:21 PM
To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>
Subject: Re: Minutes of TFAC meeting available for your review

I approve the minutes.
Thanks
Stephanie

From: Russell, Michael <michael.j.russell@ndsu.edu>
Sent: Thursday, April 4, 2019 4:43 PM
To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>
Subject: Re: Minutes of TFAC meeting available for your review

Looks good to me! I approve!

Michael Russell
Communications Specialist / Information Technology
NORTH DAKOTA STATE UNIVERSITY

From: Dertinger, Jeff <jeff.dertinger@ndsu.edu>
Sent: Friday, April 5, 2019 8:39 AM
To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>
Subject: RE: Minutes of TFAC meeting available for your review

CeCe,
I approve the minutes; I read through and didn't see anything that would be concerning or conflicting.

Thanks!
Jeff Dertinger
Associate Director / Wellness Center
NORTH DAKOTA STATE UNIVERSITY

From: Denton, Anne <anne.denton@ndsu.edu>
Sent: Monday, April 8, 2019 1:24 PM
To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>
Cc: Denton, Anne <anne.denton@ndsu.edu>; Borr, Mari <mari.borr@ndsu.edu>; Day, Stephanie <stephanie.day@ndsu.edu>; Dertinger, Jeff <jeff.dertinger@ndsu.edu>; Gao, Jerry

<jerry.gao@ndsu.edu>; Gilley, Ian <ian.gilley@ndsu.edu>; Kaiser, Nathan <nathan.kaiser@ndsu.edu>; Mach, Ben <benjamin.mach@ndsu.edu>; Mathews, Marisa <marisa.mathews@ndsu.edu>; Mbuba, Kenfrey <kenfrey.mbuba@ndsu.edu>; Muske, Adam <adam.muske@ndsu.edu>; Nitsch, Jordan <jordan.nitscj@ndsu.edu>; Russell, Michael <michael.j.russell@ndsu.edu>; Stotz, Melissa <melissa.stotz@ndsu.edu>; Wittrock, David <david.wittrock@ndsu.edu>

Subject: Re: Minutes of TFAC meeting available for your review

Importance: High

I approve of the minutes as presented.

Anne

From: Gilley, Ian <ian.gilley@ndsu.edu>

Sent: Monday, April 8, 2019 1:33 PM

To: Denton, Anne <anne.denton@ndsu.edu>; Rohwedder, CeCe <cece.rohwedder@ndsu.edu>

Cc: Borr, Mari <mari.borr@ndsu.edu>; Day, Stephanie <stephanie.day@ndsu.edu>; Dertinger, Jeff <jeff.dertinger@ndsu.edu>; Gao, Jerry <jerry.gao@ndsu.edu>; Kaiser, Nathan <nathan.kaiser@ndsu.edu>; Mach, Ben <benjamin.mach@ndsu.edu>; Mathews, Marisa <marisa.mathews@ndsu.edu>; Mbuba, Kenfrey <kenfrey.mbuba@ndsu.edu>; Muske, Adam <adam.muske@ndsu.edu>; Nitsch, Jordan <jordan.nitscj@ndsu.edu>; Russell, Michael <michael.j.russell@ndsu.edu>; Stotz, Melissa <melissa.stotz@ndsu.edu>; Wittrock, David <david.wittrock@ndsu.edu>

Subject: Re: Minutes of TFAC meeting available for your review

I approve of the minutes as presented.

Ian Gilley

Senior || Mechanical Engineering

Email: ian.gilley@ndsu.edu

Phone: (701)-893-6685

From: Stotz, Melissa <melissa.stotz@ndsu.edu>

Sent: Tuesday, April 9, 2019 10:17 AM

To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>

Subject: RE: Minutes of TFAC meeting available for your review

I approve the minutes as presented.

Melissa Stotz

Learning and Applied Innovation Manager / Information Technology Services

NORTH DAKOTA STATE UNIVERSITY

From: Mathews, Marisa <marisa.mathews@ndsu.edu>

Sent: Wednesday, April 17, 2019 4:46 PM

To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>

Subject: Re: Minutes of TFAC meeting available for your review

I approve of the minutes as presented!
Best,

Marisa Mathews
Communications Specialist | Information Technology
NORTH DAKOTA STATE UNIVERSITY
p: 949.439.2584 | marisa.mathews@ndsu.edu

From: Muske, Adam <adam.muske@ndsu.edu>
Sent: Wednesday, April 17, 2019 5:05 PM
To: Rohwedder, CeCe <cece.rohwedder@ndsu.edu>
Subject: Re: Minutes of TFAC meeting available for your review

Approved