

## Minutes of YEAR 4 WHIP Annual Meeting

March 24, 2022 - 8:30 a.m. – 3:30 p.m.

Zoom Online Meeting

### Attendees

Present: Industry Advisory Board (IAB) Members – **Berkshire Hathaway** – Tim Doggett; **GAF** – Erica Sherman and Jim Kirby; **NIST** – Tanya Brown-Giammanco and Marc Levitan; **State Farm Insurance** – Eric Haefli; **USAA** – Daniel Diaz; **Verisk** – Karthik Ramanathan and Tim Johnson; **National Science Foundation** – Denis Gray; Universities - **Florida International University** – Arindam Gan Chowdhury, Amal Elawady, Seung Jae Lee, Johnny Estephan, Ameyu Tolera, and Ioannis Zisis; **Florida Tech** – Nezamoddin Kachouie, Jean-Paul Pinelli, Emese Sziklay; **Texas Tech University** – Marie Hanza, David McClure, Kishor Mehta, Doug Smith and Delong Zuo

### Call to Order and Welcome

Kishor Mehta, WHIP Center Director, called the meeting to order and welcomed everyone participating.

### Introductions

Mehta recognized each in attendance by name and the entity they represented.

### Preamble, State of WHIP, Level of Interest and Feedback Evaluation (LIFE) Form and Phase II Beyond year 4 & 5

The title of this paragraph shows the documents reviewed by Mehta.

Preamble – Mehta reviewed the Preamble.

State of WHIP – Mehta reported the WHIP organization was in decent shape. He reviewed the Center's vision, research focus, accomplishments, and milestones for the Center's third year, membership benefits, and the timeline for year 4. Noted were

- SCOR had declined to renew their membership due to a change in focus
- National Institute of Standard Technology (NIST) has agreed to become a member
- Texas Windstorm Insurance Association (TWIA) was granted an affiliate membership by IAB because of their donation of information used in Doug Smith's project. David Williams was not able to participate in this meeting.
- Many companies were contacted concerning membership following Mid-Annual meeting in October. The total number contacted was twelve (12). Each company representative was contacted by continuing e-mails including sending them a sample of invoice. AON, AXA, and CB&I may join in the future.
- Shown below is the proposed timeline for Year 4.

	PROPOSED YEAR 4
NSF funding year	February 1, 2022 – January 31, 2023
NSF Report was due	December 15, 2021
WHIP invoices were sent	December 2021
WHIP Fees due, held in holding account	March 1, 2022
WHIP IAB Annual meeting	March 24 - 25, 2022
Project Pis submit final scope/budget	April 10, 2022
IAB approval of scope/budget	April 20, 2022
Pis/Site Directors submit SOW/budget to TTU/FIU ORS	April 25, 2022
Final project and budget approval	April 30, 2022
Pis/Business Manager submit Certification	May 10, 2022
ORS/Accounting/Directors allocate Funds	May 20, 2022
Start of Projects	June 1, 2022
End date of projects	May 31, 2023

**LIFE Form** – This online document is used to provide feedback from IAB members to the faculty on the funded and proposed projects. Mehta covered how to login and complete the form.

**Comments by Dr. Crystal Leach (NSF director) or by Denis Gray (NSF Evaluator)**

Dr. Leach, NSF director, informed earlier that she is unable to attend because of conflict. Denis Gray commented that the number of companies approached to join WHIP is impressive. The new NSF solicitation allows Associate Membership (one-half cost and one-half vote) which may be agreeable to some companies. WHIP Center may want to look in to that direction.

**Project Proposals** – Listed below are the proposals presented. Giving the presentations were the Principal Investigators (PIs) and/or their representative. During this session, Mehta, the PIs, and IAB members asked and answered questions as they pertained to the different projects.

1. **PI: Chowdhury, Co-PIs: Zisis & Elawady;** *Wind effects on ballasted rooftop photovoltaic systems;* FIU
2. **PI: Zisis, Co-PI: Chowdhury;** *Wind resistance of roof to wall interface in cold storage facilities;* FIU
3. **PI: Zisis, Co-PI: Lee;** *Wind-induced loads on irregular shaped buildings;* FIU
4. **PI: Zuo;** *Development of Fragility Curves for Tornadic Loading on Low-Rise Buildings;* TTU
5. **PI: Smith;** *Prediction of wind and surge damage to buildings by hurricane (progress report; no additional scope was proposed for Year 4);* TTU
6. **PI: Kachouie, Co-PI: Pinelli;** *Integration of field damage, hazard, and exposure data for potential use in risk models;* FIT
7. **PI: Elawady, Co-PI: Pinelli;** *Empirical vulnerability model to assess impact of windborne tree debris on low-rise construction;* FIU/FIT

### **Discussion on Intellectual Property, David McClure, Managing Director for Licensing, Texas Tech University and IAB Members**

David McClure discussed Articles F, G, H, I and J that relates to copyright and patent. Copyright Registration is obtained by the university site for the software development or enhancement is funded by the Center. Companies (IAB Members) will be informed when the copyright registration is filed. Company shall be entitled to a nonexclusive, royalty-free license to registered software for internal use. If a company re-market the software the royalty will be negotiated with the university. David answered questions from the IAB members and the participants.

### **WHIP moving into Year 4 & 5, Mehta - Phase II Beyond year 4 & 5**

Mehta gave a short presentation on changes which would take place in the future. The National Science Foundation (NSF) is directing these changes. Changes include

- Phase II beyond Year 4 & 5 - NSF Solicitation 20-570
  - Lead site: Research and administration
  - Partner site: Research
  - IAB: same as now
- Personnel
  - Center Director: PI of the lead site
  - Site Director: PI of the partner site
  - Industry Liaison Officer
- Strategy
  - A research scope unique among existing IUCRCs.
  - A portfolio of fundamental and pre-competitive collaborative research projects of interest to multiple IAB Members.
  - A mechanism to share project outcomes with all Center Members.
  - A plan for attracting new Members, retaining existing Members, and building strong relationships between the Center research team and IAB.
  - A plan to establish a diverse mix of industry Member organizations.
  - Strong representation by all Sites in Center research activities, with an emphasis on projects requiring engagement and collaboration among multiple sites.

- Governance
  - A priority-driven ranking mechanism by which the IAB can recommend funding.
  - Documentation of Center goals and objectives, created jointly by the Center research team and the IAB.
  - A uniform membership agreement conforming to the NSF IUCRC-wide model.
  - An MOU articulating the financial and operational responsibilities of each Site.
  - A set of IAB-approved Center Bylaws to document Center operating procedures
- Membership Categories
  - Full Member: Fees of \$50,000 per year with one vote
  - Associate Member: Fees of \$25,000 per year with 0.5 vote (need in by-laws)
  - Affiliate Member: Significant in-kind contribution, no fees, and no vote (need in by-laws)
  - Super Member: Fees of \$50,000 x integer with maximum of two votes
- Requirements of Phase II (5 years)
  - Minimum Membership Fees of \$200,000 X Sites
  - NSF site funding: \$100,000
  - If Membership Fees of \$300,000 X Sites (Phase II+)
  - NSF site funding: \$150,000
  - Ultimate goal beyond Phase II for the WHIP Center to be self-sufficient with fees and no NSF funding

#### **Completing LIFE forms by IAB members**

IAB members were reminded to complete the LIFE forms. Hanza will send out the Zoom recording later this evening for review.

#### **Items for Friday**

- Selection of projects and allocation of funds (total available \$300,000)
- Election of IAB Chair-Elect
- Discussion on updating By-laws to include a section on Affiliate Membership; Adjourn

#### **Adjournment at 4:00 p.m.**

(See next page for the second day)

Minutes  
Wind Hazard and Infrastructure Performance Center (WHIP) IAB Meeting  
March 25, 2022 – 8:30 a.m. – 11:00 a.m.  
Zoom Online Meeting

**Attendees**

Present: Industry Advisory Board (IAB) Members – **Berkshire Hathaway** – Tim Doggett; **GAF** – Erica Sherman and Jim Kirby; **NIST** – Tanya Brown-Giammanco and Marc Levitan; **State Farm Insurance** – Eric Haefli; **USAA** – Daniel Diaz; **Verisk** – Karthik Ramanathan and Tim Johnson; **National Science Foundation** – Denis Gray; **Center Director**- Kishor Mehta; **Site Directors** – Ioannis Zisis and Delong Zuo; **WHIP Center Program Coordinator**- Marie Hanza

**Call to Order and Welcome**

Kishor Mehta, WHIP Center Director, called the meeting to order and welcomed everyone participating. From 8:30 a.m. to 9:45 a.m. a closed session for IAB representatives was held.

**Closed Session of IAB for Selection of Projects and Allocation of Funds - Ramanathan & Doggett**

The table at the end of these minutes shows the selected projects for Year 4. For each project a company representative volunteered to be mentors.

**Debriefing by IAB Chair to the Site Directors - Doggett**

Following the end of the closed meeting, the Site Directors, Ioannis Zisis and Delong Zuo, were invited to the meeting. Doggett then briefed them on the selection of the projects and allocation of funds. A good discussion was held concerning the proposals/projects.

IAB members expressed appreciation for the quality of the proposals presented.

**Selection of Chair-Elect** – Erica Sherman of GAF, was elected as the Chair-Elect. Karthik Ramanathan was thanked for his service.

**By-Laws Changes** – Brief discussion was held but no action was taken. By-laws changes will be pursued through e-mail correspondence.

**Adjournment at 11:00 p.m.**

Prepared by Marie Hanza, *Program Coordinator - WHIP Center*

#### Approved projects for Year 4

Number	PI/Co-PI	Institution	Title	Duration	Mentors
WHIP2022-01	Zuo	TTU	Development of Fragility Curves for Tornadoic Loading on Low-Rise Buildings	1 yr	Tim Johnson, Marc Levitan, Tim Doggett
WHIP2022-02	Smith	TTU	Prediction of wind and surge damage to buildings by hurricane	As needed	Eric Haefli, Tim Doggett, Karthik Ramanathan, Tim Johnson, GAF, NIST
WHIP2022-03	Chowdhury/Zisis & Elawady	FIU	Wind effects on ballasted rooftop photovoltaic systems	1 yr	Erica Sherman, NIST
WHIP2022-04	Zisis/ Lee	FIU	Wind-induced loads on irregular shaped buildings	1 yr	Eric Haefli, VERISK, NIST
WHIP2022-06*	Kachouie/Pinelli	FIT	Integration of field damage, hazard, and exposure data for potential use in risk models	1 yr	Karthik Ramanathan, Eric Haefli, Tim Johnson
WHIP2022-07	Elawady/Pinelli	FIU/FIT	Empirical vulnerability model to assess impact of windborne tree debris on low-rise construction	1 yr	Eric Haefli, Tanya Brown-G, Daniel Diaz, Tim Johnson

\*Number 05 is omitted by design