



Dr. Wolfgang Feist
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August 19, 2011

Dear Dr. Feist and Passive House Stakeholders,

Thank you for your correspondence. I would have wished for you to respond to the letter the PHIUS Board of Directors sent you on July 1, 2011, and continued our communication efforts in a more civil, mutually respectful way and without the decision to slander our company publicly with our client and stakeholder base. The e-mail addresses you used were derived primarily from our work in the United States in good faith as partners, certainly not to be used against us. We consider that a case of violating good faith. Slander is against the law in this country and I believe it is equally serious to target the client base of a company directly to intentionally defame the business partner in any way and worse so if the intention is to offer your services to the client base instead.

I am personally deeply disappointed and saddened. The letter borders on character defamation as you are specifically naming my name. I do not understand how such action reflects any ethical behavior or allegiance or concerns with those who are working hard in the U.S. market. I'd like to suggest that the developments that are unpleasant at this time are introduced by your actions and the actions of the iPHA (also owned and controlled by you). Force never organizes anything, it destroys everything (Frank Lloyd Wright).

Your accusations come as a surprise. We have had our differences but one can say that the PHIUS board has made every effort possible to communicate with you and it certainly is not their fault that you are now deciding to sever the relationship. It was a high priority to us to maintain the international cooperation. During our last meeting in Innsbruck when we came to discuss our concerns, unfortunately we were met with ultimatums. This is not cooperation. We decided that ultimatums that are disrespectful to our work are untenable to us and notified you in our letter written June 30 and sent on July 1, that we would no longer host the European exam, and revert back to the system we had before. This is an important point in time when the relationship failed due to the lack of cooperation on your end. We have posted the meeting minutes of the meeting with you in Innsbruck and the following communications with the PHI staff on our website so that the community can review them and judge for themselves.

Your allegations of breach of contract have not been brought to the attention of the PHIUS board previously before your letter on August 17, 2011. There was no notification or any opportunity given to remedy. All three contracts state that that needs to happen before the contract can get canceled by you. The board of PHIUS received their notice of cancellation of all of our service contracts a few minutes *after* your letter was sent out to our constituents and stakeholders via e-mail. It appears that in the absence of having been given the opportunity for remedy you are currently the one who is breaching the contracts. In addition to this disconnect, we counted many false statements and accusations presented to the community as a reason for your decision. We would like to respond publicly in form of this letter to correct this public defamation and character assault.



A few general words on organizational structure of the parties involved, the PHIUS role and the relationship with the PHI:

PHIUS is an independent non-profit organization with the mission to implement the Passive House Standard in the North American market, to remove barriers for this implementation and to aim for making the standard best building practice by 2020. PHIUS has always been an entirely independent organization with no other legal connection to the PHI other than the following three service agreements:

1. Distribution of PHPP since 2004-2011
2. Certification of projects since 2008-2011
3. Hosting of exam since November 2010-2011

PHI is a sole proprietorship company owned by Dr. Feist founded in 1996 to conduct research in the Passive House field and to disseminate and promote the standard in Germany and internationally. Dr. Feist also controls the subsidiary iPHA. iPHA is not, as initially on its website stated last year, a non-profit.

All of PHIUS' work in this country, beginning with its founding in 2007, has been financed and performed by its staff: all research, initiatives, the events organization for promotion and advocacy. PHIUS paid consulting fees to PHI for services rendered just like any other organization if the inquiry was not otherwise covered under the service agreements. PHIUS also paid for being trained as a certifier. PHIUS has financed translations and PHPP unit conversion, both instrumental to the successful dissemination in the United States. PHIUS has multiple times offered to pay for the translation of the Protokollbands into the English language but was not given permission by PHI to do so. PHIUS has always respected that and in regards to PHPP it is not any different. It will be discussed in more detail below. We certainly feel that we do not need to bolster our own image, our achievements speak for themselves.

We certainly acknowledge the information transfer that was offered initially at no cost from PHI to PHIUS. We are also happy to report that we have contributed to the international development with unparalleled success and feel that we have repaid our debt by market creation. PHIUS/ e-colab have accomplished a lot over the past 9 years: Much of it was organizational work, entirely independent of PHI. Other work was identifying local materials and building and refining prototype homes to research cost effective methods to build PHs in the North American market. Identifying code issues, getting those changes started with the respective agencies, taking the discussion to the conferences and symposia discussing high performance building, to the politicians etc. The list is long. Our main focus has always been to defend the standard and quality implementation and we will continue to do so.

In 2008 the first English speaking PH curriculum in the world was launched in Urbana. Soon those first students started to build projects and the collective knowledge grew quickly from the bottom up. With limited information from the PHI available in English, the community looked back at its own roots of Passive Housing. Those who were in it in the 80s came back in, reminded everyone that those details the Germans talk about had already been published in the books from Shurcliff to Nisson. The core piece—ventilation—had also already been discussed in one of Shurcliff's self-published books, essentially describing what now has been formalized by the PHI. Those books are sitting on Dr. Feist's bookshelf.



Climate transfer for superinsulated structures: the community benefitted greatly from the excellent work done by Building Science Corporation in regards to climate-specific designs and performed adaptation of those solutions for superinsulated walls. Climate transfer was where the rubber met the road in North America, where it was decided if a project failed or lived, where the unique North American knowledge base of the builders really excelled. PHI had reached its limits and it became clear that adaptation of the standard for different climates was probably in order. It also became clear that it was no surprise that the central European movement had been so successful: compared with the climate challenges in North America it was almost easy to design a PH in 4500 HDD. Therefore, I would like to reiterate, that almost as important if not more important for the success of PH in North America was and is the existing deep knowledge base of the pioneers, the knowledge of those who came up with this concept in the first place and those who have learned from them since.

We discovered further surprising circumstances during our work in regards to mechanical equipment transfer: highly efficient foreign heat exchange cores in the very cold and humid Canadian climate can self-destruct within a short period of time. Others had problems performing. Quickly it became clear that even technology transfer can be impacted by climate transfer and that what works in central Europe or Japan might not work in Ottawa, Canada. More specific research is needed.

We are just at the beginning. Another example is the compact heat pump available on the European market. There are a few reasons that this “magic box” as we call it will remain magic a little more into the future. Some of those imported units also self-destructed. Controls in those units can't handle the HERZ switch from Europe to the United States and they become fire hazards. Import does not seem an easy solution. Systems need to be developed using locally available components and they need to be designed and optimized for the North American climates - most of which have cooling and latent load issues, a largely irrelevant topic in Central Europe.

Many new findings have emerged that shape and twist the standard in interesting new ways. We will share those findings with the community during the upcoming 6th North American Passive House Conference October 28/29 in the Washington DC metro area and will continue to support the evolution of the North American knowledge base with continuing education and advanced training.

Of course, our main concern now is the strength of this emerging community of stakeholders here in the United States and Canada. Our concern is their alliance to each other and maintaining unity and the common goal in mind (that's why we created the nPHA) to move things forward. Our mission as a non-profit: to remove barriers to the implementation of the Passive House Building Energy Standard today in North America and to facilitate a development that could make PH best building practice. Our goal is to apply sound building science in accordance with energy metrics that make sense in the context of the North American culture and climate. Our concern is implementing and building quality-assured (not failing!) Passive Buildings, specific to this culture and climate and for North American people.

We do think there should be and needs to be an international community beyond local concerns. We also feel this international community should be a democratic one and we question that a for-profit company with a sole owner is to determine how this standard plays out internationally. This would be considered by some more a cult than an organization. It would reinforce a seemingly



proprietary standard that governments generally will reject. In fact, this is exactly the issue that is being discussed in the European Union holding up the moving forward of the Passive House standard in Europe. That will be a problem for any government.

15 kWh also might not be the answer for all climates as we all know too well in North America from our building and research experience over the past years of doing this! The peak heating load criteria is largely irrelevant. We have to be open at least that in different climates the standard guiding numbers might vary slightly. If the Passive House Standard is truly international and a public good, in other words a physics principle that holds true everywhere and is owned by no one, then it will be and needs to be locally defined and adapted and take shape. That's what is so exciting about it in the first place. The international leader I would trust needs to have a great deal of integrity. A letter of the nature and destructive force that was just sent out by Dr. Feist in my mind questions his ability to be that person. There were times when I thought differently. But I assume that is because I had not seen a willingness to harm others who have a different opinion than his. The international community in my humble opinion needs an independent diplomat who has no business interest or ownership in any part of this.

German cars are a good export good and sell well in North America, but for many reasons mentioned already, we believe that German Codes controlled by Germans do not export well.

This leads me to the allegations of Dr. Feist's letter.

PHIUS received one request with a deadline to submit requested documentation in regards to a certification project that had been questioned by a third party in Canada. PHIUS did indeed comply with that request, contrary to Dr. Feist's claim. PHIUS had not heard from PHI since until yesterday's letter from Dr. Feist arrived and had been sent to all of our clients and stakeholders.

Accusation 1 – Certification without requisite documentation and risking the reputation of the PHI certification

At the beginning of 2011, PHI's agent in Canada challenged a project that had been built in his neighborhood and that had received certification from PHIUS. It was the first project in this very difficult climate to receive certification.

We were asked to provide all the drawings and documentation for the certification and we were told after an unusually quick review of what we submitted, that the PHI had concluded that this project is not anywhere close to the standard and would perform more at 30 kWh than at 15. This echoed the allegations from the Canadian agent surprisingly close.

We were told the following:

1. Ventilator: there was no way that a Canadian ventilator could perform any better than 60% since the brand installed had a cross flow heat exchanger.
2. Canadian fiberglass windows were used. The derivation of our window values was challenged.
3. A significant thermal bridge around the perimeter had not been accounted for.
4. While located across the a park and facing due south, the PHI was of the opinion the 25 percent additional shading factor needed to be assumed.



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5. PHI challenged our climate data (the reviewing agent had no idea that we had been generating climate data for at least three years with the blessing of Juergen Schnieders who generates climate data for the PHI and had trained PHIUS on the procedure).

We started to do more work on this and included new data previously unavailable to us on windows in the file as well.

1. The ventilator data turned out by PHI's own rules to be just fine, just as we had it entered in the PHPP. HVI apparent sensible effectiveness of 88 percent minus 12 percent.
2. Now 8 months after we initially certified the project, the window company finally agreed upon our insistence and inquiries to provide the actual THERM files for the window brand, which they previously had refused. The window values were slightly worse than we had initially assumed. That was in our opinion good news because now we had more accurate data. PHI has never provided us with the accurate calculation method for window frames even upon inquiry (I am assuming it is to protect their product certification as proprietary) so we were left like everybody else to make an educated guess as best as we could based on the information that was available to us last year.
3. The thermal bridge: We did discover a discrepancy that led to a miscalculation. We had been told that the angle holding the brick veneer would be thermally broken with aerogel. That had not been documented in the drawings but communicated verbally. This was not implemented on site. We had accounted for a thermal bridge, but the actual thermal bridge without the aerogel was worse than the one accounted for in the submitted PHPP calculations. This pointed to the need for more standardized onsite quality assurance and third-party field verification, which we have actively created with the PHIUS+ program
4. Shading: we assumed no shading on the south as we had understood the building being across a street from a park that was lower than the street level would have little to none. After an as-built solar pathfinder study, it turns out that that assumption was correct for the top two floors, but the two lower floors were more heavily shaded. **The certification protocol currently does not require proof of exact shading calculations. The significant impact of the measured actual shading on the balance shows clearly a necessity for shading to be part of the final QAQC verification.** Our assessment of the shading was incorrect, so was the suggestion by the PHI. But even an on average 85 percent reduction factor had a significant impact on the model and caused the project to fall out of certification range. The experience here shows that higher insolation in North America needs a more strict quality assurance requirement and we would like to suggest adding to the blower door test and commissioning protocol the requirement for a solar pathfinder study, to avoid these kinds of problems. To my knowledge, a solar study as built is currently not required. If it had been required, it would have been submitted.
5. Climate data: As noted, our staff had been trained to generate climate data and has been doing so with great success for a few years now.



It is startling that the PHI is trying to depict us as the ones that are threatening the reputation of Passive House certification. As far as we can see, we have created the reputation through our actual work and proof of concept in the United States and the Canadians are starting to appreciate that work now as well. PHIUS has made its name by actually being the only organization in the United States and Canada so far to have consistently defended the standard, insisted on quality implementation and we intend to continue to do so. We have generated quite some competency in the certification process in North America. Being accused of threatening the reputation and quality is outright insulting. We have done due diligence within the given frame work, tools and training provided to us by the PHI to execute the certification to the best of our knowledge and capacity. Yes, we are still learning everyday and mistakes sometimes are made, that is only to be expected if there is not a long track record of anyone out there doing what we are currently doing. We are creating the road. Certainly with no ill-conceived intention and nothing that warrants a public accusation of threatening the reputation of the certification or ending the certification contract without notification.

We are working as pioneers in regards to certification in North America, we have learned the ropes and have mastered the climate specific pitfalls because we have hit most of them by now, we know how important the knowledge of construction techniques and climate specific wall design considerations are. We have seen a lot of wall designs over the years that would not survive a year. But our license is revoked because of incompetence and threatening the reputation? If we go there will be a big hole and the Irish Passive House Academy will not be able to fill it because they just don't have any experience in this country. Not one built project. No, not anybody can certify anywhere. You need local knowledge and competence, otherwise that proposition is just plain irresponsible.

Those who have been working with us through certification throughout the years know how far we have come, about the diligent review process, the back and forth and the design recommendations, the help that we provide for a very affordable price. Capacity has sometimes been an issue, but PHIUS is quickly expanding and building capacity.

During the time of working as a certifier in the United States since 2007, we have certified approximately 20 projects and have another 100+ in the review phase. This is significant experience in many different climate zones. I would be curious to learn which certifier other than the PHI has such a record.

In addition, if we were anything but diligent and meticulous in our certification process—if we wanted to exaggerate Passive House accomplishments, we most certainly would have certified more projects than we have. In truth, we have been extremely careful and scrupulous, because we understand the perils of having projects not perform as advertised in the market.

Performing the certification process here in the US we have discovered a few important issues.

PHPPs accuracy in North America and its climates (unless one only uses European materials and only builds in the cool moderate climate with similar solar radiation to Central Europe) is only as good as the assumed boundary conditions for the factors that we currently don't have accurate answers for. A lot is still lacking, including:



Accurate window calculation methods for local windows to get the values we need. We have requested from the PHI to be provided with accurate calculation methods to be able to determine those values to no avail. We have done our best to make a scientifically valid assumption and are moving forward conducting our own research and creating protocols to do so in North America, since the PHI has provided no guidance or support.

Accurate evaluation of North American ventilation heat recovery, especially critical in very cold climates (12 percent general subtraction from non-PH certified products might be true in Europe, but it hasn't been scientifically proven to hold true in different climates, we are moving forward with testing and verification! The units may perform better than is assumed by PHI protocols.)

Climate data: only Meteoronorm data in the United States is provided in the current PHPP 2007 EN_1.2 We discovered significant discrepancies in solar radiation in the direct PHPP output files from Meteoronorm which led to very inaccurate calculations. The heat and cooling load outputs are incorrect and can't be relied upon. Custom Climate data set generation capability is a must for North American certifiers because of the many micro-climates.

Market conventions and appropriate QAQC: Maybe in Germany a supervisor signing a declaration that everything was built to the specs is trustworthy. Chances here are very high that that is not the case. Hence our decision to provide PHIUS+, which creates a rigorous trustworthy Quality Assurance program performed by a third party. This will limit everyone's risk including ours

Trustworthy cooling load calculations and the absence of latent peak load consideration in PHPP.

Building science guidelines and hygrothermal verification of appropriate wall assembly designs are necessary for all North American climates! This is not required under current PHI certification protocol.

A clear shading protocol on how to accurately assess shading in PHPP. For high solar radiation areas and cooling climates this needs to be accurate! Right now it is not and there is no clear guideline how to come up with that number.

Conclusions: The certification system by the PHI is not appropriately developed yet for other climates and markets than Central Europe to address higher risk factors and technical data not available. We have filled in many of the missing puzzle pieces and have documented and slotted for research potential inaccuracies as we discovered them. Until recently certifiers were not appropriately trained at the PHI. As of May 2011, there was not even a PHI standard training protocol for certifiers in existence. So, maybe six out of the 32 are now appropriately trained one would hope?

Have they been trained for the eventualities of international building science cases that they might encounter in all countries of the world? The claim that any certifier can certify anywhere in the world is absurd. Anybody in building science, at least in this country, knows that climate expertise and building practices experience is critical to keep buildings from failure and that's a



full time job to master in your region. It does not make sense to promote this. It makes sense to promote skilled regional experts to assure quality.

The European certification program—as conducted to this point—is in our opinion a failure. Only about 1000 projects have actually been verified out of 30,000 over the past 15 years! Austria is off and running with the uncertified Austrian Passive House Standard (only a handful projects in Austria ever sought certification, I suppose that's how one gets high adoption rates, not to certify at all). US Projects that PHIUS rejected because they did not meet the standard based on our verification, were a week later posted on the iPHA website (Dr. Feist's outreach outfit). Apparently anyone who generates a PHPP can post a so claimed Passive House project without any verification by anybody! The PHI is not so rigorous after all. We brought this problem to PHI's attention during our last meeting in Innsbruck. They agreed that this was not good but to our knowledge no action followed to prevent this from happening or to remove such projects in question. We would like to prevent such ineffectiveness and counter productivity of a certification program here in North America and we will do our utmost to achieve that goal in a consistent and systematic manner

Accusation 2 – Competing Professional Certification Scheme

The Certified Passive House Consultant (CPHC) program of PHIUS was established in 2008. At that time (encouraged by Dr. Feist to do so) we set out to train and to develop an English language curriculum and certification. At that time there was no testing in English available. Worldwide the PHIUS curriculum and certification of professionals was the first one in the English language. Based on the German exam, which was kindly provided to PHIUS by the PHI, we translated and developed a take-home exam with questions similar to those of the exam provided as a proxy until hopefully we would work together on a common testing strategy in English with our partners. We had no knowledge that the PHI and its European partners were one year later announcing to be working on a European CEPH curriculum, Certified European Passive House Designer. We were not included in those discussions even though Dr. Feist was aware that we had created a North American version. The strategy appeared to be to create regional trainings, which made perfect sense to us. We understood (incorrectly as we know now) that once done with this, we would collaborate on a similar effort for North America. It never occurred to us that they had no such intention. Instead they turned around and declared the European version international, ignoring our training and exam work, by that time in its third year.

One could argue that they created a competing English speaking professional certification scheme. PHI is now trying to come onto the U.S. market with the European curriculum to compete with us. It appears that they have a sense of a tenuous hegemony and respecting the work and collaborating with those who have significant experience by now apparently does not fit this worldview. The European course and the exam are falsely represented by PHI as international! I will say that again and again until it changes and in actuality becomes one! Pictures of German building sites, building details and design exercises in Austria, Germany and Switzerland are international all right. European is a more accurate description of what is actually being talked about.

All that set aside, we have worked hard to come together with the PHI. Last year we made the effort to sign on as a host for the Certified European Passive House Designer designation that they offer in Europe in the hope that we would be able to inform the exam for the North American market down the road. During the annual meeting of PHIUS board members and Wolfgang Feist and Witta Ebel 2010 in Dresden they made a few promises verbally. One was to grandfather in



and to recognize the 170 or so previously certified consultants and add them to their database. Wolfgang also re-stated then that it would be OK to use the PHIUS orange house logo in parallel with their certified designer logo. The contract that then was signed said that there could not be another certification other than in collaboration with the PHI, just as we had discussed. We assumed Wolfgang would keep his word. In good faith we proceeded with the contract. We certainly understood that we were collaborators.

Apparently, we were mistaken and we were told in Innsbruck one year later that we could hand out participation certificates for our course with our logo on it, but we would have to remove our professional designation. At this meeting in 2011, they also reversed their earlier agreement and now wanted us to decertify the 170 or so professionals. Please see the posted notes from the meeting for more information on the topic.

The PHIUS Board and our advisors felt that was an unacceptable and unreasonable demand. We had understood in 2010 that this was a collaboration, now in 2011 we were expected to hand over all our work for free to the PHI and remove all our consultants and our certification and rights from the market without having any assurance that they would live up to the claim of partnering in the future?

In the meantime the exam situation had gotten untenable. Lack of communication from them, seriously late receipt of the exam prior to the exam date for translation into IP units, climate misunderstandings, German details and a surprise change in weighting points made only 15 out of 63 pass the exam. People were extremely unhappy. It was a disaster. PHIUS was soon blamed for not preparing people to pass the European test.

At that point we had to ask ourselves what is more important, to teach to a European test or to make sure that people have the climate specific knowledge that they need to build high quality Passive Houses in the North American market and to protect our already certified stakeholders.

We chose the latter and informed the PHI at the end of June of our intent to no longer host the European exam, counter to what they now falsely claim in their letter that we did not let them know.

Don't get us wrong, we would have preferred collaboration, input on exams for North America, getting the green light to organize it and make it easier to proctor, but that was rejected by the PHI. It was their decision. It is PHI's decision to interpret the contract as they have now changed to and we can really not do anything about it other than pointing out that they are not holding up their verbal agreements.

Soon thereafter we informed the CPHC stakeholders of the shift in course. We explained to them that they still could take the exam from other European providers if they desired the designation and we also told them that they could certify a project and submit it directly to the PHI to obtain their designation. PHIUS does not offer that option. We informed the stakeholders that we intended to fulfill our obligations under the existing exam hosting contract and that after the contract has been terminated according to specified timelines we will shift to a computer based North American exam to obtain the North American designation only, that existed before the Europeans identified the US as a market for their training and before they started testing through us in the United States.



And again, claiming that the concept is international and anybody can apply PH anywhere if they only have good base knowledge flies in the face of common sense; practical experience in a particular context is invaluable and necessary. The newly arriving European providers on the US market will have a hard time preparing their students locally as they are missing experience. They will have to hire Americans as they already have (most who've gotten experience with PHIUS). They have spent their professional career in the European market and are unfamiliar with the construction practices and climates in the United States. Dr. Feist claiming that this is easily transferrable certainly shows his willingness to market his program, but also his inexperience in this transfer, otherwise he would not take it lightly and would know that recommending it is irresponsible. We are looking at an aggressive competing attempt by Dr. Feist to export and promote his European training product. It is commendable, he is trying to sell. But to try to profit from what we have built over the past years here and trying to discredit us is unacceptable and unethical. We used to be friends.

Accusation 3 – PHPP Copyright violation:

The IP version of the PHPP has proven to be instrumental in the U.S. success. It was created by Dylan Lamar in 2008 and he insisted correctly, that without this version the broad implementation of PH in the United States would be forever stifled and it would remain a barrier to implementation. He was right.

It was this version that made PH accessible to people and soon the interest skyrocketed. No mystery here, people could see and feel and understand what they were doing by heart. It was a very reasonable thing to do! Other than what has been alleged by Dr. Feist, we had that version vetted by Juergen Schnieders and Wolfgang Feist and Witta Ebel, sent them the files, received word from Juergen Schnieders after that vetting process, that it looked good and that we could go ahead using it. That green light was in writing.

It came in form of an e-mail. The alleged re-writing can only refer to the additional excel page that we made to help people organize their building data calculations. To my knowledge there was no re-writing of it, and the IP pages refer directly to the original SI pages that are hidden underneath, and can be unhidden in a few clicks.

I'd be curious to hear what the exact contention is. We certainly would have been able to clarify this if we had been approached with this concern. We have been using and including it on our CD for three years now as I said with written permission from the PHI. The IP version of the PHPP is not sold separately, it is on the CD as an addition. The price of the CD and handbook can be determined by the distributor and is not specified in the resale contract. And generally most people buy it at a discounted rate of \$150, which is less than they pay for in Germany or would pay through any other distributor. If the PHI had wanted to withdraw the permission for us to use the IP file, that would have been an acceptable path as well, but accusing us of copyright violation after they have been aware of the translation, condoned the distribution for more than two years now, knowing the content and after seeing its success in the U.S. market, is just plain dishonest. During our last meeting in Innsbruck they made it clear that they would not permit the translation for any further PHPP versions and updates and we have accepted that. In no way have we disregarded our standing agreement with them. The contrary is true. We have made sure that this had been agreed to and held off until we had the green light from the PHI.



Again, the PHIUS Board and staff are deeply disappointed and saddened by the path that the PHI has chosen and in the approach it has taken. We do feel that infighting and PR ploys such as this only distract from the true work that so urgently needs to be done. We hope that the PHI can find its way to being more flexible and respectful in regards to others working around the world to promote Passive House and sound building science, in the meantime, we will continue to move forward with our mission and supporting North American stakeholders to the best of our ability.

Sincerely,

Katrin Klingenberg
Executive Director, PHIUS