SignatureDx

May 6, 2026

Honorable Chairman Senator Frank Farry
CC Senate Institutional Sustainability and Innovation Committee
Pennsylvania State Capitol
501 N. 3rd Street
Harrisburg, PA 17120

RE: Senate Bill 792 Policy Hearing

Honorable Chairman and Members of the Committee,

Thank you for giving me an opportunity to provide testimony regarding SB792. I am CEO and co-founder of Signature Diagnostics, a Pittsburgh-based life sciences company that looks deeply into bodily fluids like blood and saliva to develop diagnostic tools that help identify diseases and medical conditions when they are in the early and silent phases. I am here to share how we plan to make a paradigm shift in health outcomes and move from reactive treatment to proactive healthcare. I would like for you to consider our work at Signature as a use case to understand the need for funding to commercialize healthcare innovation and to demonstrate why Pennsylvania is well positioned to be an innovation leader that addresses a wide spectrum of clinical needs.

I've spent my career building companies in Pennsylvania. I founded and ran Fivestar Development, an IT consulting firm, for 26 years. Fivestar generated over $150M in revenue and employed 60 people at its peak. About eight years ago I received an opportunity to apply my experience developing technology in life sciences when I helped evolve and commercialize a pharmacogenomics platform called YouScript. I then bought its parent genetics testing lab Genelex and moved its headquarters to Pittsburgh from Seattle. Subsequently in 2020 we sold both companies to Invitae for $100M. Shortly after, I found myself coaching my current co-founder, Dr David Peters on how he might commercialize some of the research he had been doing at Magee Womens Research Institute. His work was compelling and he was driven to see its in clinical use. By the end of that year, I decided not to retire but instead used some of the proceeds to start Signature.

I hope my experiences provide helpful insight because I've seen what it takes to build, hire, and compete—and I've seen how quickly these opportunities can shift to other states or die on the vine when early-stage capital and incentives are stronger elsewhere.

Despite advances in medicine, the U.S. has one of the highest maternal mortality rates among high-income nations—roughly triple that of Sweden, Japan, and Germany. Many complications advance quietly, and the current system is built to respond after problems emerge, not to flag risk before it escalates. These burdens are not shared equally. Black women face mortality rates more

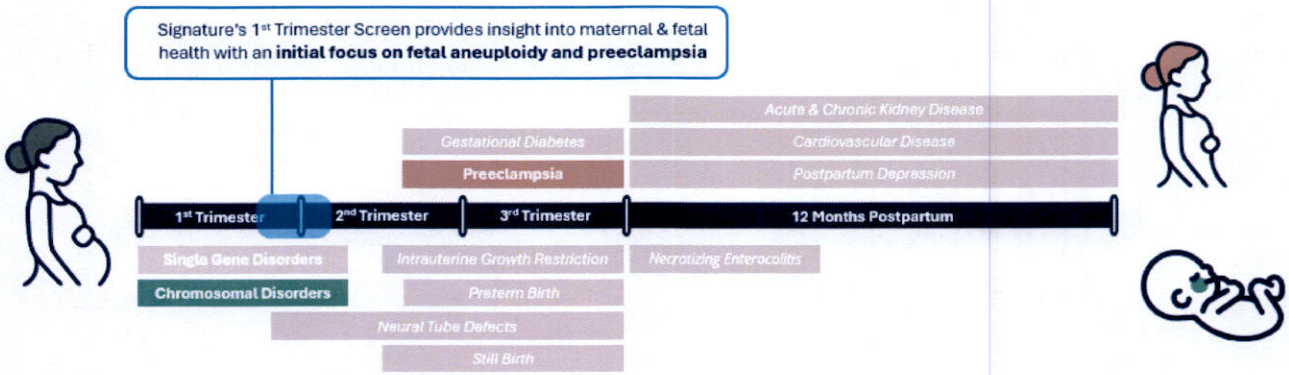
than three times higher than white women, an example of real gaps in how our system serves different communities.

The case for better prediction is about earlier visibility and more time to act. This is exactly the shift that SB 792 can help enable.

Preeclampsia affects 1 in 25 pregnancies in the U.S. and is a leading cause of maternal and infant illness and death. Globally, it accounts for an estimated 42,000 maternal deaths and 500,000 fetal and neonatal deaths each year. It progresses silently, biological mechanisms begin in the first trimester, but symptoms often do not appear until after 20 weeks. By then, delivery is frequently the only treatment, driving premature births and long-term consequences for mother and child. Signature is developing a first-trimester blood-based screening to detect preeclampsia risk in weeks 10 through 16. With early identifications, interventions like low-dose aspirin are most effective. The science exists to identify conditions like preeclampsia and the tools are within reach.

Prenatal care has evolved from routine vitals and history to molecular diagnostics that extract far more from a single sample. We are now entering the era of blood-based predictive tools which Signature develops that can identify biomarker-driven insights to flag risk in the first trimester when intervention is most effective.

The long-term vision is personalized pregnancy management: care pathways calibrated to each patient's individual risk profile. The direction is clear, earlier signal, more context, and more tailored care.



Our platform Prenactive extracts multiple clinical insights from a single first-trimester maternal blood sample. We start with fetal aneuploidy and preeclampsia, but as this timeline shows, the potential extends to gestational diabetes, preterm birth, growth restriction, and conditions spanning all three trimesters into postpartum. One sample, multiple insights, lower cost that is what makes this scalable and why it can meaningfully change how prenatal care is delivered while reducing costs of care.

Complications like preeclampsia can develop quietly. By the time symptoms appear, options narrow. Earlier detection is not prediction for its own sake. It gives clinicians and patients more time to act with intention, shifting from crisis response to managed risk. Earlier visibility opens intervention windows, added surveillance, specialist involvement, preventive therapies, and

clearer escalation plans before the situation becomes emergent. It does not replace clinical judgment; it strengthens it by making risk visible sooner.

No single organization can commercialize a life sciences innovation alone. Our science originated at Magee Womens Research Institute with University of Pittsburgh Faculty. Clinical partnerships with UPMC give us access to real-world patient populations and workflows. Laboratory and industry collaborators help us move from validated science to deliver a product clinically. This ecosystem already exists in Pennsylvania. What is needed is the funding and policy support to help companies like Signature bridge the gap to clinical deployment.

Year	Revenue	Employees	Burn	External Funding	State Funding	Federal Funding
2021	$1.0M	7 FT, 6 PT	($1.3M)	$1.2M Angel		Two SBIRs, one socred in fundable range for $2.3, not awarded
2022	$1.8M	12 FT, 6PT	($2.9M)	$500K SBA Loan $300K Angels		Four SBIR applications, none funded
2023	$1.3M	10 FT, 6PT	($3.1M)	$400K SAFE RK Mellon	$56K 2022 R&D	$44K 2022 R&D
2024	$1.5M	7 FT, 6PT	($3.2M)	$150K SAFE Innovation Works $300K SAFE LifeX $150K SAFE CFH Investments $300K Convertible Angels	$66K 2023 R&D	$50K 2023 R&D
2025	$1.7M	7 FT, 6PT	($2.1M)	$750K Convertible Angels $100 Convertible Innovation Works $100 Convertible CFH Investments $100 Seed Angel	Missed deadline	Two SBIRs and one STTR applications, all fundable for $5.2M total
2026	$2.8M	12 FT, 6 PT	($7.0M)	$100K Convertible Angels $100K Seed AAK Foundation $400K Seed Angel	Anticipating $120K 2025 R&D if awarded	Anticipating $110K 2025 R&D
Total	$10.1M		($19.6)	$4.95M	$242K	$204K

This table above shows what it takes to build a life sciences company in Pennsylvania. Over six years, Signature has funded $19.6 million while operating our lab business. We have generated $10.1 million in revenue and raised $4.95 million in investments of which state and federal support totals $446,000. Signature has submitted many SBIR grant applications. Five were scored as fundable but none have been awarded (one due to COVID others waiting to hear). The bottom line: there is currently a $4.1 million gap to bring this paradigm changing science into clinical use. SB 792 can help bridge this kind of gap for companies that have done the science but need targeted support to cross the finish line.

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So how does Signature get across the final valley of death? The research is done, the partnerships are in place, the product is built but without capital to complete commercialization, it all risks stalling at the finish line. This is not a failure of innovation. It is a failure of the funding environment. SB 792 can change that, so the next innovative companies do not have to face this valley alone.

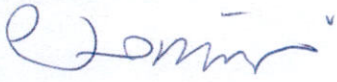
Pennsylvania already has what it takes: world-class research universities, large clinical networks with specialists exploring new approaches to care, a strong track record in diagnostics and life sciences, and a willingness among stakeholders to collaborate around measurable health goals. Research depth, health system scale, and collaborative institutions create a setting where earlier health solutions can be studied, implemented, and scaled if the right policy and funding support is in place.

I want to close with a direct ask. Pennsylvania can lead by convening policymakers, providers, researchers, and innovators around a shared goal: earlier health insight that improves outcomes while reducing costs of care.

SB 792 can position Pennsylvania as a place where health solutions are not just invented but brought to patients. Other states are competing for this role. We have the ecosystem to win but it requires deliberate investment. The shift from reactive care to proactive healthcare is achievable, and Pennsylvania can lead the way.

Thank you for your time and yourconsideration of this important legislation.

Best regards,



Dave Colaizzi
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