**Engineering Solutions in Pediatric Healthcare**

April 27, 1:00-4:30

MJIS 2001 + Zoom

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| 1:00-1:20 | Welcome and history of biomedical engineering and pediatrics at Purdue and IUSM | Aaron Lottes  George Wodicka  Bob Hannemann  Wade Clapp |
| **Where are we now** | | | |
| 1:20-1:30 | Pediatric congenital and cardiovascular disease | Larry Markham (IUSM/Riley) |
| 1:30-1:40 | Embryonic origin of pediatric disease | David Umulis (BME) |
| 1:40-1:50 | Pediatric oncology detection and therapy | Wade Clapp (IUSM/Riley) |
| 1:50-2:00 | Neonatal warming | Sherri Bucher (IUSM),  Jackie Linnes (BME) |
| 2:00-2:08 | “A picture is worth a thousand words” for mHealth | Young Kim (BME) |
| 2:08-2:16 | Imaging Biomarkers | Yunjie Tong (BME) |
| 2:16-2:23 | Cardiovascular imaging / integrating IUSM and BME | Conner Earl (MD/PhD student) |
| 2:23-2:55  (5-6 min each) | Potential pediatric applications of Purdue BME research | Hugh Lee  Chi Hwan Lee  Vitaliy Rayz  Deva Chan  Matt Ward |
| 2:55-3:05 | Break (or catch-up on the agenda) |  |
| **Future Directions** | | | |
| 3:05-3:15 | Purdue Engineering Initiative in Engineering and Medicine | David Umulis (BME) |
| 3:15-3:20 | Integrating IUSM-WL and Purdue Engineering | Matt Tews (IUSM-WL) |
| 3:20-3:30 | Clinical challenges with pediatric devices (or lack thereof) | Ben Gaston (IUSM/Riley) |
| 3:30-3:40 | Academia challenges with pediatric device development | Craig Goergen (BME) |
| 3:40-3:50 | Industry challenges with pediatric device development | Emma Moran (Cook Medical) |
| 3:50-4:30 | Working discussion on how to increase opportunities and overcome challenges in the development and translation of pediatric medical devices | **ALL**  (George Wodicka to kick-off) |