

Christopher Rapoport

(208) 610-6286 | crapoport1@gmail.com | [\[LinkedIn\]](#)

Skills

Software: SolidWorks, Ansys Mechanical, MATLAB, PIVlab

Laboratory Skills: Test method design, Good Manufacturing Practice (GMP), Good Laboratory Practice (GLP), Particle Image Velocimetry, TA Instruments Hybrid Rheometer

Experience

Anuevas Technologies Inc., Flagstaff, AZ

Research and Development Engineer Intern | May 2024 – Present

- Assembled polymer liquid embolic device for use in animal trials using cleanroom and GMP procedures.
- Performed mechanical testing of polymer based products using TA instruments Hybrid Rheometer.
- Supported the design and in-vitro testing of catheters, stents, and flow diverters using a physiologically relevant flow model.
- Prepared Pre-Submission documents for FDA Investigational Device Exemption approval pipeline.

Bioengineering Devices Laboratory, NAU, Flagstaff, AZ

Senior Research Assistant | Nov 2023 – Present

- Led device testing in accordance with ISO and ASTM guidelines for mechanical and performance evaluation.
- Built benchtop models simulating human neurovascular anatomy for testing both commercial and developmental devices.
- Designed mechanical fixtures and supported validation testing for a novel radial force measurement system used in neurovascular device evaluation.
- Designed and executed in-vitro simulated-use tests for aspiration catheters and flow diverters.
- Designed, modeled, 3D printed and assembled custom testing fixtures for the evaluation of medical devices.

Research and Projects

Particle Image Velocimetry (PIV) Capstone Project, NAU

Project Manager and Test Engineer | Jan 2025 – Present

- Led the development of a Particle Image Velocimetry system for integration with a physiologically relevant flow-system to study cerebral hemodynamics and clot-device interaction.
- Selected and integrated optical components (lenses, mounts, laser source) to produce a planar laser beam.

Urdea Undergraduate Research Grant, NAU

Principal Investigator | May 2024 – May 2025

- Awarded \$7,500 to conduct Finite Element Analysis of novel nitinol stent designs using Ansys Mechanical.
- Managed project timeline, deliverables, and interdisciplinary collaboration.

Education

Northern Arizona University, Flagstaff, AZ

Bachelor of Science in Mechanical Engineering, Expected Graduation Date Dec 2025

Certifications and Awards

Certified SolidWorks Professional, Ansys Self Expanding Stent Certification

Publications

1. Becker TA, Lewis KL, Berns HF, Robertson SE, Clark WE, Wells JC, Alnajrani MK, **Rapoport C**, Barhouse P, Ramirez-Velandia F, Filo J, Young M, Muram S, Granstein JH, Ogilvy CS. Aneurysm dome and vessel pressure measurements with coiling, stent assisted coiling and flow diversion. Acta Neurochir (Wien). 2025 Jan 9;167(1):8. doi: [10.1007/s00701-024-06392-5](https://doi.org/10.1007/s00701-024-06392-5). PMID: 39789382.
2. Berns H, Han K, Ramirez-Velandia F, Lewis KL, Robertson SE, Clark WE, Wells JC, Alnajrani MK, **Rapoport C**, Schwartz S, Hakes K, Granstein JH, Ogilvy CS, Becker TA, Young M. Pump Versus Syringe: Aspiration Thrombectomy Direct Pressure Comparisons in a Comprehensive Benchtop 3-Dimensional-Printed Circle of Willis Model. Oper Neurosurg (Hagerstown). 2025 Jun 10. doi: [10.1227/ons.0000000000001653](https://doi.org/10.1227/ons.0000000000001653). Epub ahead of print. PMID: 40498479.