



Advocacy-Research-Military Studies
Longitudinal Curricular Program
NCC Pediatrics Residency



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ARM Curriculum Overview

The Advocacy-Research-Military Studies (ARM) Program is a longitudinal curricular experience embedded within the traditional block-rotation curricular structure. This allows for a curricular experience individualized to the resident's future career plans, in line with ACGME Pediatric Resident Review Committee guidelines.

All residents have one ARM half-day per block to individualize their education to fit with their future career goals, giving them an opportunity to engage in advocacy, subspecialty care, quality improvement, research, military pediatrics, and other pediatric-related fields. This longitudinal block is specifically directed towards each individual resident's learning goals, helping to prepare residents to move on to the next phase of their careers. It focuses on self-directed learning and individual career exploration. The intent is to provide a longitudinal elective educational experience that cannot be completed in a traditional block schedule.

A 2nd ARM half-day may be granted by the Scholarly Oversight Committee for Residents (SOCR) to residents who present a specific project that aligns with an ARM domain. This represents an advanced individualized curriculum, requiring independence and achievement of goals under indirect supervision. A 2nd ARM half-day may be applied for by presenting an ARM Project Proposal to the SOCR. For approval, an ARM project must have the potential to deliver a work product prior to graduation for the resident (please see separate policy in Housestaff Manual for details).

Over the course of 2 years, the ARM Program would set aside no less than 32 half-day sessions, and no more than 47 half-day sessions, to count as an educational unit according to the July 2013 ACGME Pediatrics Program Requirements Section IV.A.6.a).(1)

Eligibility: PGY-1 (one-half day per block) and PGY-2/PGY-3 (up to two half-days per block)

SOCR – the NCC Peds Scholarship Oversight Committee for Residents: The ARM curriculum will be administered by SOCR, a longitudinal curriculum oversight committee charged with approving and monitoring individualized ARM Programs. Members will be approved by the Program Director.

Individual resident advisor: A faculty member who would oversee and coordinate a resident's individual ARM project. This person needs to be identified by the resident.



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Examples of Possible ARM Experiences:

- Research
 - Bench, Clinical, Educational
 - Case Report/Series
 - Review Article
- Quality Improvement
- Education
 - Attending USUHS or WRB Faculty Development courses
- Military:
 - Achieving Military Qualification
- Teaching Experience
 - Curriculum Development
 - Formal instructional role
- Volunteering/Advocacy
 - Examples:
 - Volunteering at student health clinic at local high school or college
 - Volunteering as team doctor for a local high school or college sports team
 - Volunteering at clinic for indigent children
 - Volunteer work at the Federal AAP Office
 - Volunteer work with a legislative health affairs assistant in Congress
- Enhanced Clinical Experience
 - Multi-D Clinic participation
 - Ex: CF, craniofacial, DM clinic, NICU grad clinic, Lupus Clinic, Long Term Cancer Survivor Clinic, Sickle Cell Clinic, Spina Bifida Clinic, Spasticity Clinic
 - Participation in specialty clinics or conferences at other hospitals
 - Ex; Adoption Clinic, Peds CT Surgery Conference, academic half days for subspecialties

Potential Goals (Deliverables):

- Academic Poster
- Publication
- Certificate/Proof of Completion
- A Military Award or Decoration
- Written Reflection (approx. 1 page, typed)
- Log of Hours

Eligibility and Exclusion Criteria

- All PGY-2 and PGY-3 residents who submit an ARM proposal and follow the guidelines will receive two half-days per block, whereas PGY-1s and those PGY-2/3s without a project proposal will receive one half-day per block.
- Residents on program level or institution level probation are not eligible for a 2nd ARM half day so that they may focus on reading/study as per their remediation plans.
- Residents on Fitness Enhancement Program are not eligible so that they may focus on improving their fitness.



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Application Process

- The resident shall propose and follow a set of concrete milestones. The resident must be the primary author of the proposal, although input from faculty and other residents is encouraged.
- Proposal goals and objectives should correspond to the SMART guideline (Specific, Measurable, Achievable, Realistic, Timely).
- Residents must submit a semi-annual update that aligns with the proposal goals & objectives. The SOCR will review ARM proposals and then provide one of three actions: approve, disapprove, or approve with modifications.
- ARM proposals will be judged based on
 - Consistency (same or related experience over the course of the 2 years)
 - Ability to complete within residency time period
 - Goals and objectives which incorporate core competencies of the ACGME and the residency
 - The “deliverable” – a concrete accomplishment that is suitable for inclusion on a CV.
 - Applicability to Individualized Curricular Goals
 - Letter or email of support from a mentor and supervisor of an experience
- If the ARM project involves an outside institution, a point of contact and lead time are needed to generate a Memorandum of Understanding.

Changes to the Longitudinal Curriculum

- Minor modifications can be made during the curriculum with approval of the faculty mentor and may be submitted with semi-annual updates
- Substantial changes in content must be approved by the SOCR.

Expectations

Participation in the longitudinal curriculum is dependent on continuing to meet expectations.

- Project Syllabi are included at the end of this document
- 90% of clinic notes completed within 72-hour period; no outstanding notes over 2 weeks
- Submission of semi-annual update on the experience to date.
- Ability to produce log of each half-day experience, if requested.
- Monthly contact with the faculty mentor – formal or informal, in person or electronic.

Evaluation

The SOCR co-chairs will evaluate the resident’s progress semi-annually, and an end of training memo will be completed describing work product.

Scheduling

- Residents participating in the ARM program under SOCR guidance will have two half-days per month on day-shift rotations, one half-day on the PGY-2 NICU block, and no half-days on night-shift rotations or rotations out of the DC Metro area.
- Residents on team rotations will coordinate ARM days with other team member commitments such as continuity clinic and their own ARM days.
- No two residents on the same team will schedule their ARM half-day on the same day.
- Residents on the ARM Program will inform rotation supervisors of scheduled dates a month ahead of time along with their continuity and call obligations.
- Only one ARM half-day will be scheduled in the short block (Block 1) if that block incorporates the ARM Program.



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Important Information for Presentation/Publication

Publication Clearance

In addition to manuscript or poster, requires the following documents:

-WRNMMC PUBLICATION CLEARANCE COVER SHEET

(This requires signoff by Peds Department Chief)

Turnaround in usually 1 week, this must be obtained prior to manuscript submission/poster printing

Documents can be found on Department of Research homepage: <https://wrnmmc-intranet.health.mil/Sites/DETR/ResearchProgramsDepartment/SitePages/Home.aspx>

Important Dates for Presentation Opportunities:

AAP general or SOUS (abstracts typically due July for October Presentation)

PAS (abstracts due January for April Presentation)

WR Research and Innovation Month (abstracts typically due January for April presentation)

Project Syllabi

Formal research

What is it:

- Clinical
 - Evaluate:
 - New drugs/treatments/devices
 - New screening programs
 - Clinical trial involvement is likely beyond the scope of pediatric residency.
- Survey
 - Survey methodology used to gain insights into opinions and practices in large samples and may be descriptive and/or be used to test associations.
 - Feasible type of research during training
- Observational studies
 - Cohort, Case/Control, Cross-sectional study
 - Most feasible type of research during training
 - Existing databases (MDR, M2, Departmental Clinical Registries, DHA registries, Carepoint)
 - Exposures and outcomes have already occurred
 - Strengths:
 - Feasible and inexpensive
 - Limitations:
 - Limited availability of confounders
 - No control over when or how exposure or outcome measured
 - Recall bias
- Note - you may start on a project at the beginning, or one that is already in motion, deliverables will be adjusted based on the stage you start

Goal - Peer Reviewed Publication

Minimum Requirement - EIRB protocol with outcome letter

*if already EIRB approved, then submission to conference/journal

Do I need IRB? Yes

Steps:

1. Research mentor identification (contract strongly encouraged)
2. EIRB
3. Follow steps as outlined in protocol
4. Abstract draft (presentation and/or manuscript)
5. Conference Presentation (poster/podium)
 - a. Abstract submission



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- i. Publication clearance should be obtained prior to abstract submission AND prior to final presentation
 - b. Poster draft
 - i. Publication clearance should be obtained prior to abstract submission AND prior to final presentation
 - c. Poster Printing
6. Manuscript (work on simultaneously with poster if possible)
 - a. Manuscript draft
 - b. Publication Clearance

Case Report/Series

****When you have a case you are planning to write up, have the family sign a DD2870 (record release form) this will need to be submitted for publication clearance. If you are using patient images, ensure this is explicitly written on this form****

What is it:

- Describing interesting cases, treatments or outcomes
- Good For:
 - unreported/unusual adverse med reaction
 - unexpected/unusual presentation of a disease
 - new association/variation in disease process
 - presentation/diagnosis/management of new disease
 - unexpected association between disease or symptoms
 - an unexpected event in the course of observing or treating a patient
 - Findings shedding new light on possible disease/adverse effect
- Strengths:
 - Feasible and inexpensive
 - Report new observations
 - Hypothesis Generating
- Limitations:
 - Cannot test hypotheses
 - Selection bias
 - Low level of evidence

Goal - Peer Reviewed Publication

Minimum Requirement - Abstract submission to conference for poster presentation

Do I need IRB?

If >2 cases being described (i.e. case series) this should be submitted to EIRB; otherwise no

Steps:

1. Case identification and DD2870 form completion
2. IRB (if indicated as above)
3. Identify venue/journal for presentation
4. Abstract draft (presentation and/or manuscript)
5. Presentation (poster or podium)
 - a. Abstract submission
 - i. Publication clearance should be obtained prior to abstract submission AND prior to final presentation
 - b. Poster draft
 - i. Publication clearance should be obtained prior to abstract submission AND prior to final presentation



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- c. Poster Printing
6. Manuscript (work on simultaneously with poster if possible)
 - a. Manuscript draft
 - b. Publication Clearance
 - c. Journal Submission (and this is where the fun begins...)



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Review Article

What is it:

- Systematic method for identification of studies that address a similar question – and synthesize the data either qualitatively or quantitatively
 - Qualitative – Systematic review
 - This portion of the study should have a systematic search for all relevant literature on the topic
 - Search process should be reproducible
 - Quantitative - Meta-Analysis
 - Abstract the data from previously identified studies
 - Pool and analyze as a whole
- Typically journals will request these from authors, and they are not typically generated by authors and submitted. This option will require staff with article request.

Goal - Peer Reviewed Publication

Minimum Requirement - Manuscript Draft

Do I need IRB? No

Steps:

1. Research mentor with review article request (contract strongly encouraged)
2. Literature Review
 - a. *Consult with clinical librarian - search process should be comprehensive and reproducible*
3. Meta-Analysis (if indicated)
4. Manuscript Draft
5. Publication Clearance



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Quality Improvement/Process Improvement (QI/PI)

What is it

QI/PI is a systematic approach for reducing waste or improving efficiency, reliability and performance of a service or product.

DHA has adopted the A3 Framework for QI/PI

The A3 Framework is a structured 8 step problem-solving approach focusing on:

- Identifying a problem that is measurable or reportable
- Analyzing current condition information
- Exploring and identifying root causes
- Developing, deploying, and sustaining countermeasures
- Empowering others to make and sustain improvement

What qualifies for scholarly activity:

- Non - residency related QI/PI project
 - Note - you may start on a project at the beginning, or one that is already in motion, deliverables will be adjusted based on the stage you start
- Residency QI/PI Project lead

Goal - Peer Reviewed Publication

Strongly Encouraged: A3 Yellow Belt Training Certificate

Minimum Requirements: EIRB outcome letter, Abstract submission

Do I need IRB? Yes

Steps:

1. Project Identified
2. EIRB
3. Follow steps as outlined in protocol
4. Abstract draft (presentation and/or manuscript)
5. Presentation (poster or podium)
 - a. Abstract submission
 - i. Publication clearance should be obtained prior to abstract submission AND prior to final presentation
 - b. Poster draft
 - i. Publication clearance should be obtained prior to abstract submission AND prior to final presentation
 - c. Poster Printing
6. Manuscript (work on simultaneously with poster if possible)
 - a. Manuscript draft
 - b. Publication Clearance



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A3 Yellow Belt Training

This is a 10 hour (full day) of training on A3 methodology offered regularly throughout the year. You should utilize ARM time to attend this course.

Signups are at: <https://carepoint.health.mil/sites/SPIDR/sitepages/home.aspx>.

Please coordinate schedules with chief resident so that you can attend in the first 6 months of your project time.



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Education/Military Experience

What is it:

- Education
 - Taking online learning modules or auditing courses at USUHS or local universities
 - Attending USUHS or WRB Faculty Development courses
- Military
 - Achieving Military Qualification

Goal – Certificate of completion

Pre-Approval Requirements:

- Faculty mentor from our program with approval letter

Deliverables:

- Log of hours
- Certificate/Proof of completion

USU Faculty Development Courses are an excellent means to accomplish this! They are offered throughout the year locally and virtually and 30 hours (20 classes) in a particular track (Scholarship & Research, Academic Leadership, Teaching) will get you a certificate of completion.

You can sign up here: <https://fac-dev.usuhs.edu/login> (USU single sign on required, and can be requested through the site)



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Teaching Experience

1 – Curriculum Development

What is it:

- Curriculum development
 - Outlining goals and objectives for a rotation or education initiative within residency or at USU
 - Curating collection of educational materials for the curriculum

Goal – Develop a successful curriculum to be used in academic setting

Pre-Approval Requirements:

- Faculty mentor from our program with approval letter

Deliverables:

- Log of hours spent in setting
- Curriculum materials (examples: goals and objectives, teaching slides, review materials)

2 – Curriculum Participation/Leadership

What is it:

- Participation in or Leader of curriculum program already underway

Goal – 8-12 teaching hours per academic year

Pre-Approval Requirements:

- Faculty mentor from our program with approval letter

Deliverables:

- Log of hours in prep/teaching



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Volunteering/Advocacy/Clinical Experience

What is it:

- Advocacy/Volunteering Examples:
 - Volunteering at student health clinic at local high school or college
 - Volunteering as team doctor for a local high school or college sports team
 - Volunteering at clinic for indigent children
 - Volunteer work at the Federal AAP Office
 - Volunteer work with a legislative health affairs assistant in Congress
- Enhanced Clinical Experience:
 - Multi-D Clinic participation (CF, craniofacial, DM clinic, NICU grad clinic, Lupus Clinic, Long Term Cancer Survivor Clinic, Sickle Cell Clinic, Spina Bifida Clinic, Spasticity Clinic)
 - Participation in specialty clinics or conferences at other hospitals (Adoption Clinic, Peds CT Surgery Conference, academic half days for subspecialties)

Goal – 8-12 half days per year in the setting

Pre-Approval Requirements:

- Site mentor at volunteer location with approval letter (if applicable)
- Faculty mentor from our program with approval letter

Deliverables:

- Log of hours spent in setting
- 1 page reflection on experience