I served on the DoD review panels for both the SMART (2 days) and NDSEG (1 day) fellowships. Below I have summarized the award mechanics and listed my thoughts on the key components to include/address for a competitive application.

**DoD SMART FELLOWSHIP**

- **2012/2013 Award statistics and mechanics**
  - Applicants for graduate fellowships can be seniors or current grad students → read together
  - Applicants for undergrad fellowships can be in any year of undergrad → Read together
  - 2000 apps (3-5K in prev. yrs) across all fields; 200 apps in biosciences (field I reviewed)
  - Each application receives 3 reads
  - Based on rankings, the top ~50% is sent to DOD for matching (~8% of applicants are selected)
  - The DOD placements are across 68 DoD labs, and 12 government agencies (e.g., NSA, CIA)
  - Recipients can decline/ accept (will likely know the lab they will work at prior to accepting)
  - Once the DoD receives the list, the matching is all that matters → Not awarded in rank order
  - Students at top will likely have multiple sites/labs/agencies that are interested
  - **CRITICAL:** Most apps that are good (do not have to be excellent) in each area will be competitive, but surprisingly, very few are good in each component

- **Applications notes**
  - Point potentials
    - GPA, transcripts, test scores, resume: 25 points
    - Publications and presentations: 5 points
    - Awards and honors: 5 points
    - Summary of education and professional goals: 20 points
    - Interest and research explanation: 20 points
    - Community and volunteer work: 5 points
    - Leadership experiences: 5 points
    - Teamwork experiences: 5 points
    - References: 10 points
    - **TOTAL: 100 points**
  - GPA/GRE are heavily weighted
  - Many categories are only 5 pts, but if these are left blank (common) you will receive 0 → Even if you have listed these in your resume/CV, do not leave anything blank
  - To emphasize, do not leave anything blank → Be creative if you have limited experience (e.g., presented in a journal club or class, or mentoring a labmate will get you 1 or 2 pts instead of 0.
  - For pubs/pres, honors, community, leadership, teamwork: List the activity and level of achievement (e.g., a regional award, an activity that was 20 hrs/week) and then provide a short narrative describing the item and outcome. A list (even with many items) scores lower than items with context and/or a quantitative metric (e.g., 20 hrs/week, 2 students in the state)
  - In goals statement:
    - Write passionately and genuinely with strong organization (use separate paragraphs)
    - Suggested sections: Personal Background, research interests and project ideas, link to DOD, choice of DOD labs, long-term goals
    - Critical: Need to spend at least 1 paragraph or more discussing SPECIFIC DOD SITES that you want to match with and how they facilitate your goals → MUST MAKE STRONG CASE FOR WHY YOU WANT THE DOD POSITION AND SOME CHOICE LABS
  - In interest and research explanation
    - Need strong organization. For each research experience communicate the goal, approach, and the outcome/productivity (e.g., new finding, publication or presentation
    - Tie back to DOD and choice of specific labs mentioned in goals statement
DoD NDSEG FELLOWSHIP

- 2012/2013 Award statistics and mechanics
  - Applicants must be seniors or 1st/2nd year graduate students
  - 3000 applicants for 200 awards (~7%) but pool is STRONGER than SMART since no work req.
  - Biggest field is biosciences (645 apps) followed by chemistry (340)
  - Biosciences is where most bioengineering topics are received (also some to Mat Sci, ChemE)
  - All apps receive at least 2 reads; some receive 3 reads (if on cut-off border or discrepancy)
  - After reading, applications are ranked and a conservative cut-off is applied. In my panel the top 258 application (out of 645) were sent in ranked order to DoD for final selection

- Applications notes
  - The pool is hyper-competitive (my mean was about 60/100 with high scorers in the 80s)
  - In my scoring, a GPA of 3.7 and GRE in the 80 percentile would score 20/25 pts
  - Even with perfect essays and references, you can’t receive a NDSEG with weak GPA/GREs
    - → NOT TRUE for NSF GRFP (no GREs; scored only for innovation and broader impact)
  - Point potentials
    - GPA, GRE, transcripts 25 points
    - Publications, presentations, and patents 10 points
    - Awards and honors 5 points
    - Leadership experiences 5 points
    - Teamwork experiences 5 points
    - Memberships and community/ volunteer 5 points
    - Scientific or research experiences 20 points
    - Summary of goals 15 points
    - References 10 points
    - TOTAL 100 points
  - Need some kind of publications and/or presentations and strong GPA/GRE
  - Must be solid on every category, and strong on several
  - DO NOT LEAVE ANY SECTIONS BLANK (blank sections receive 0)
  - List items in each category using descriptive language and quantitative metric (hrs/week, # of award recipients in the state, school, country) as opposed to a list
  - Be creative if needed to put something in each category (see examples above given for SMART)
  - For research experience:
    - List the project, position, dates of work, and location/advisor
    - For each, add a short paragraph discussing the work, your specific contributions and some specific outcome (a new finding, 1 publications, 2 posters, 1 presentation, etc.)
    - List each project separately (even if in same lab)
    - Both number of experiences and level of depth are valued
    - Critical to show organization and deliverables in each case to differentiate application
  - For other “list” sections (leadership, teamwork,), use similar format but a 1 sentence description
  - For summary of goals
    - Use paragraphs and be specific → many applications run together during review
    - Suggested sections: Personal motivation, past research and results, proposed research project (include aims, brief discussion of experiments, and impact), Link to DoD and long-term goals
    - Include enough detail to show you have an actual research project in mind (not that you want to work in “tissue engineering”)
    - I scores the following: Check for motivation/personal interest, research hypothesis, experimental aims/methods, impact, link to DoD, long-term goals
  - Although only 3 references are required, all 4 will be presented if submitted