

**What is Acute Care Surgery at UH?**

Provides care for:

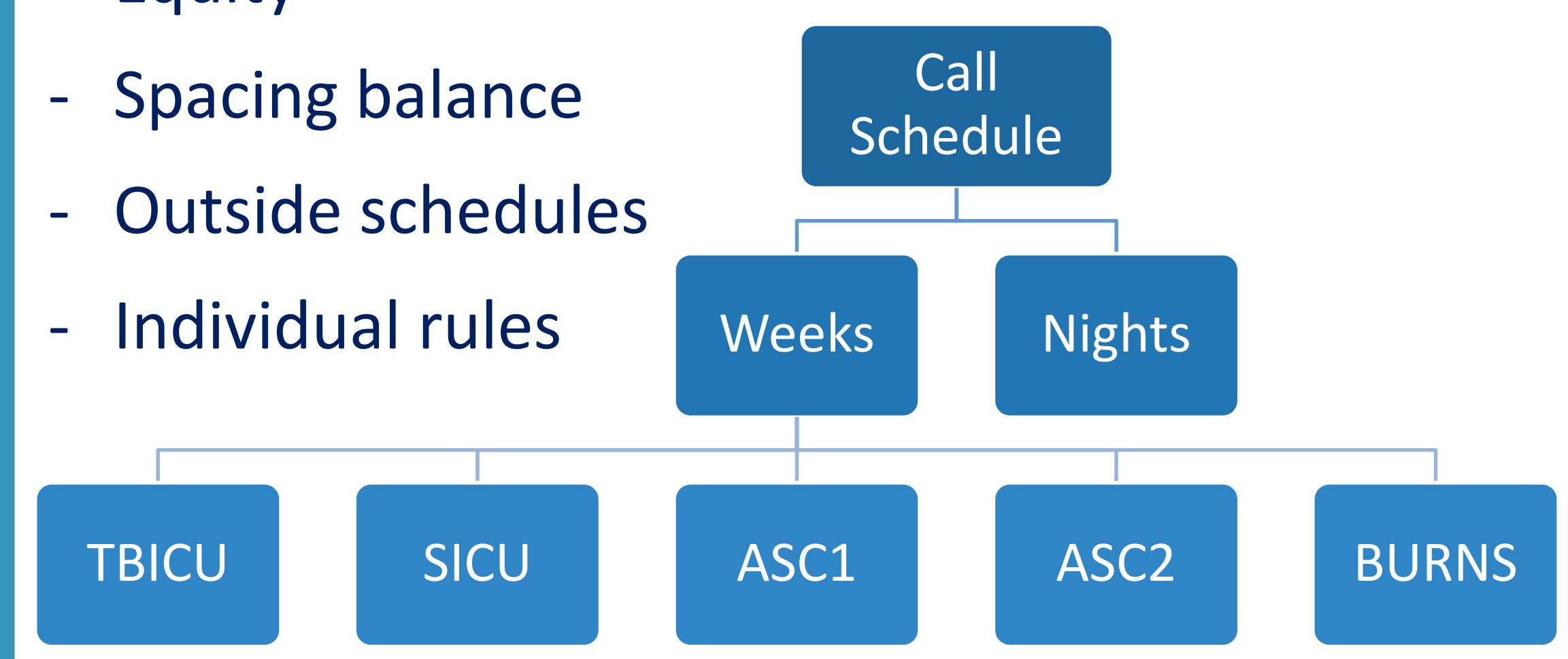
- critically ill and injured patients due to trauma and burn
- patients who need emergent medical attention

**What is their scheduling challenge?**

Objective: 5 units to be always covered by 15 attendings.

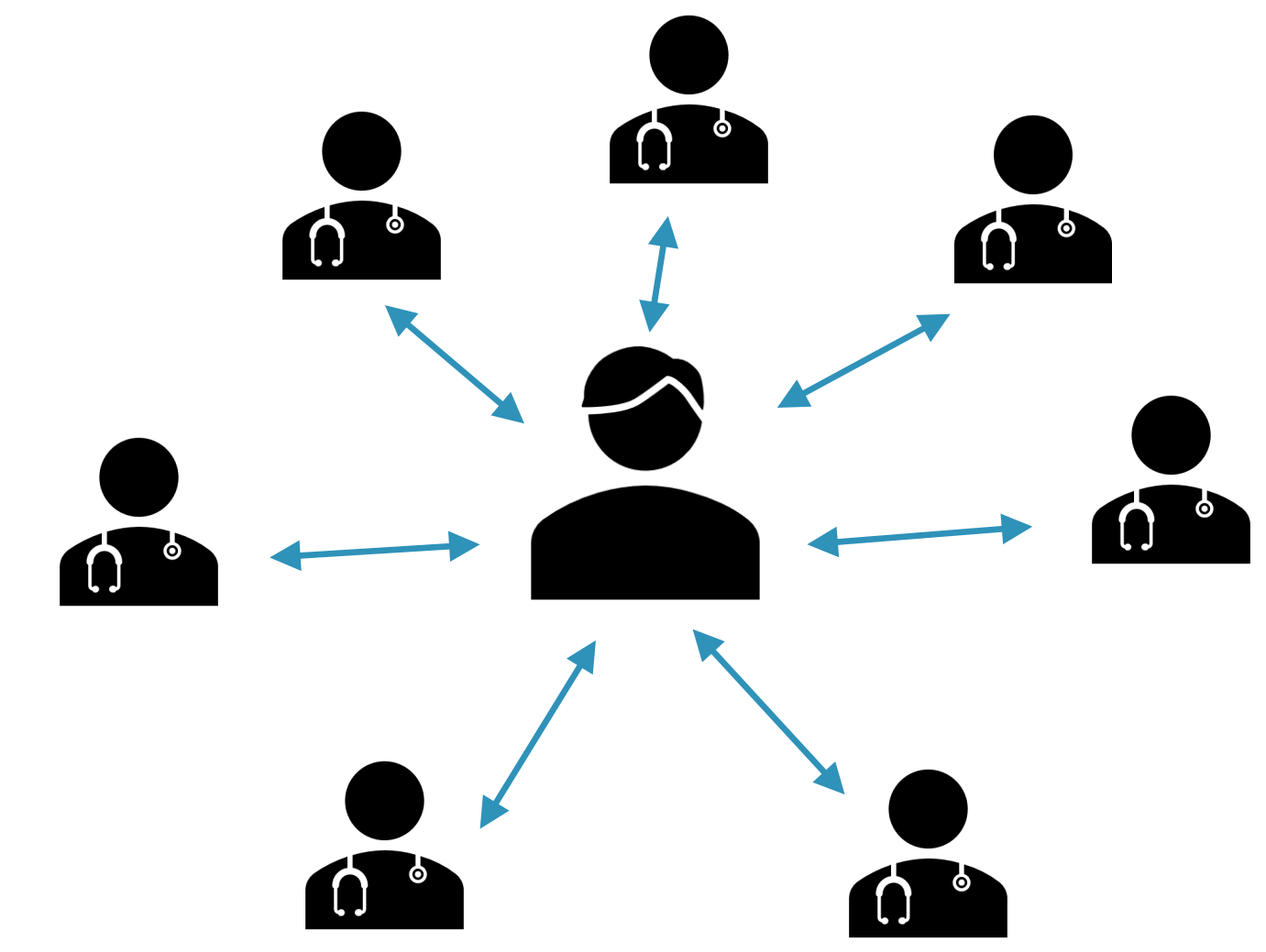
The schedule must consider:

- Off time requests
- Equity
- Spacing balance
- Outside schedules
- Individual rules



**What is their current approach?**

The Division Chief creates the schedule by hand.



HIGH TIME AND EFFORT

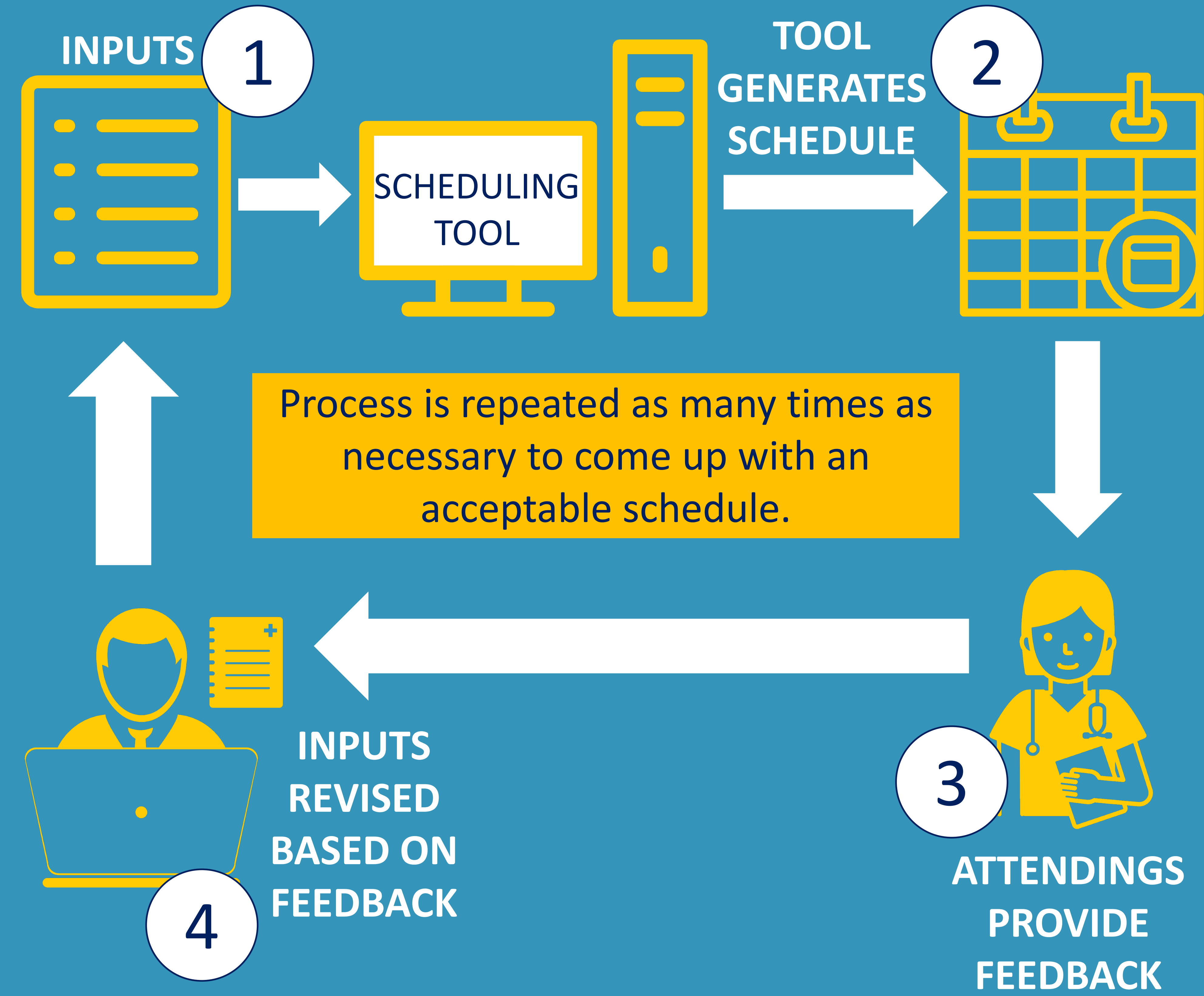
**How can we help?**

Our CHEPS team is working to create a tool that can automate and optimize the scheduling process! We are...

- Building a digital tool to generate high quality schedules within seconds
- Using a mathematical model to enforce scheduling rules and identify the best possible schedule based on chosen criteria
- Reducing the time and work involved with revising the schedule

# Automating Trauma Call Scheduling for Short and Long-Term Gains


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**How does the tool work?**

1. Inputs – Gather inputs such as attending’s time off requests and target number of assignments in each unit
2. Tool generates schedule – Users just need to hit “run”!
3. Attendings provide feedback
4. Inputs revised based on feedback

**What are the short-term goals?**

- Building many schedules in a short amount of time
  - Obtaining rapid feedback and getting a better understanding of trade-offs within schedules.
  - Increasing usability of the tool
  - Reducing amount of manual work time
  - Increasing clarity on schedule preferences
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**What are the long-term goals?**

- Removing the perception of bias in scheduling, ensuring equity
  - Equity spanning years with holiday assignments
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**Acknowledgements**

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