

# Duke Men's Soccer Forward Lineups

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A quick analysis of Duke Men's Soccer forward combinations over there 6 game win streak between Sept 11 and Oct 5 2021.

```
duke_mens_soccer_forward_lineups <- duke_mens_soccer_forward_lineups %>%  
  mutate(Min = (MinE - MinS)) %>% mutate(tandem = paste(FWD1,"-",FWD2))
```

```
duke_mens_soccer_forward_lineups %>% count(tandem) %>% arrange(desc(n))
```

## Data Manipulation

```
## # A tibble: 8 x 2  
##   tandem      n  
##   <chr>    <int>  
## 1 Thor - Shakur    13  
## 2 Scotty - Conor   10  
## 3 Thor - Conor     6  
## 4 Scotty - Shakur   3  
## 5 Shakur - Conor    1  
## 6 Thor - Felix      1  
## 7 Thor - Miguel     1  
## 8 Thor - Scotty     1
```

## Create different efficiency metrics

```
duke_forward_lineups_over50 <- duke_mens_soccer_forward_lineups %>%  
  group_by(tandem) %>%  
  summarise_at(vars(Min, GoalsT, FWD1G, FWD2G), list(Total = sum)) %>%  
  arrange(desc(Min_Total)) %>% filter(Min_Total >= 50)  
  
duke_forward_lineups_over50 <- duke_forward_lineups_over50 %>%  
  mutate(goal_percent_scored = (FWD1G_Total + FWD2G_Total)/ GoalsT_Total)  
  
duke_forward_lineups_over50[is.na(duke_forward_lineups_over50)] <- 0  
  
duke_forward_lineups_over50 <- duke_forward_lineups_over50 %>%  
  mutate(goals_per90 = (90 * GoalsT_Total)/Min_Total)
```

```
d <- ggplot(duke_forward_lineups_over50, aes(x = Min_Total, y = goals_per90, label = tandem))

d + geom_point(color = "#00539B", size = 7) +
  geom_text(hjust=-0.25, vjust=-0.25, color = "#00539B", size = 4.25) +
  ylim(0, 5) +
  xlim(0, 350) +
  ggtitle("Duke Men's Soccer Forward Combos 2021 (Last 6 Games)") +
  theme(panel.background = element_rect(fill = "lightblue",
    colour = "lightblue",
    size = 0.5, linetype = "solid"),

    panel.grid.major = element_line(size = 0.5, linetype = 'solid',
    colour = "white"),

    panel.grid.minor = element_line(size = 0.25, linetype = 'solid',
    colour = "white"), plot.background = element_rect(fill = "#D3D3D3"),
  axis.title.x = element_text(color="#00539B", size=14, face="bold"),
  axis.title.y = element_text(color="#00539B", size=14, face="bold")
  ) +
  xlab("Total Minutes Played") + ylab("Goals Produced per 90 Min")
```

